CONTAINS NO CBI

EPA

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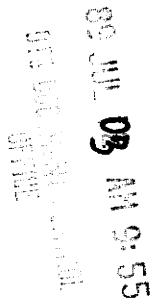
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Comprehensive Assessment Information Rule

REPORTING FORM



When completed, send this form to:	For Agency Use Only:
Document Processing Center Office of Toxic Substances, TS-790 U.S. Environmental Protection Agency 401 M Street, SW Washington, DC 20460 Attention: CAIR Reporting Office	Date of Receipt: _____ Document Control Number: _____ Docket Number: _____

EPA Form 7710-52

SECTION 1 GENERAL MANUFACTURER, IMPORTER, AND PROCESSOR INFORMATION

PART A GENERAL REPORTING INFORMATION

1.01 This Comprehensive Assessment Information Rule (CAIR) Reporting Form has been completed in response to the Federal Register Notice of..... [1][2] [2][2] [8][8]
mo. day year

CBI

[ ] a. If a Chemical Abstracts Service Number (CAS No.) is provided in the Federal Register, list the CAS No. ..... [0][2][6][4][7][1]-[6][2]-[5]

b. If a chemical substance CAS No. is not provided in the Federal Register, list either (i) the chemical name, (ii) the mixture name, or (iii) the trade name of the chemical substance as provided in the Federal Register.

(i) Chemical name as listed in the rule ..... NA

(ii) Name of mixture as listed in the rule .... _____

(iii) Trade name as listed in the rule ..... _____

c. If a chemical category is provided in the Federal Register, report the name of the category as listed in the rule, the chemical substance CAS No. you are reporting on which falls under the listed category, and the chemical name of the substance you are reporting on which falls under the listed category.

Name of category as listed in the rule ..... NA

CAS No. of chemical substance ..... [ ][ ][ ][ ][ ][ ]-[ ][ ]-[ ]

Name of chemical substance ..... _____

1.02 Identify your reporting status under CAIR by circling the appropriate response(s).

CBI

Manufacturer 1

[ ] Importer 2

Processor ..... (3)

X/P manufacturer reporting for customer who is a processor 4

X/P processor reporting for customer who is a processor 5

[ ] Mark (X) this box if you attach a continuation sheet.

1.03 Does the substance you are reporting on have an "x/p" designation associated with it in the above-listed Federal Register Notice?

CBI

[ ]

Yes ..... [X] Go to question 1.04

No ..... [ ] Go to question 1.05

1.04 a. Do you manufacture, import, or process the listed substance and distribute it under a trade name(s) different than that listed in the Federal Register Notice? Circle the appropriate response.

CBI

[ ]

Yes 1

No ..... (2)

b. Check the appropriate box below: NA

[ ] You have chosen to notify your customers of their reporting obligations

Provide the trade name(s) .... _____

_____

[ ] You have chosen to report for your customers

[ ] You have submitted the trade name(s) to EPA one day after the effective date of the rule in the Federal Register Notice under which you are reporting.

1.05 If you buy a trade name product and are reporting because you were notified of your reporting requirements by your trade name supplier, provide that trade name.

CBI

[ ]

Trade name ..... MONDUR TD-80 ; TDI 80-20

Is the trade name product a mixture? Circle the appropriate response.

Yes 1

No 2

1.06 Certification -- The person who is responsible for the completion of this form must sign the certification statement below:

CBI

[ ] "I hereby certify that, to the best of my knowledge and belief, all information entered on this form is complete and accurate."

K.L. SCHAPER — NAME

K L Schaper — SIGNATURE

30 JUNE 89 — DATE SIGNED

MANAGER, PRODUCT SAFETY — TITLE

(412) 963 - 5805 — TELEPHONE NO.

[ ] Mark (X) this box if you attach a continuation sheet.

1.07 Exemptions From Reporting -- If you have provided EPA or another Federal agency with the required information on a CAIR Reporting Form for the listed substance within the past 3 years, and this information is current, accurate, and complete for the time period specified in the rule, then sign the certification below. You are required to complete section 1 of this CAIR form and provide any information now required but not previously submitted. Provide a copy of any previous submissions along with your Section 1 submission.

CBI
[__]

"I hereby certify that, to the best of my knowledge and belief, all required information which I have not included in this CAIR Reporting Form has been submitted to EPA within the past 3 years and is current, accurate, and complete for the time period specified in the rule."

NA

NAME	SIGNATURE	DATE SIGNED
TITLE	(_____) _____ - _____ TELEPHONE NO.	DATE OF PREVIOUS SUBMISSION

1.08 CBI Certification -- If you have asserted any CBI claims in this report you must certify that the following statements truthfully and accurately apply to all of those confidentiality claims which you have asserted.

CBI
[__]

"My company has taken measures to protect the confidentiality of the information, and it will continue to take these measures; the information is not, and has not been, reasonably ascertainable by other persons (other than government bodies) by using legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding) without my company's consent; the information is not publicly available elsewhere; and disclosure of the information would cause substantial harm to my company's competitive position."

NA

NAME	SIGNATURE	DATE SIGNED
TITLE	(_____) _____ - _____ TELEPHONE NO.	

[__] Mark (X) this box if you attach a continuation sheet.

PART B CORPORATE DATA

1.09 Facility Identification

CBI Name [P][P][G]_[I][N][D][U][S][T][R][I][E][S]_[I][N][C]_____

[_] Address [P][I][T][T][S][B][U][R][G][H]_[R][O][A][D]_____
Street

[C][I][R][C][L][E][V][I][L][L][E]_____
City

[O][H] [4][3][1][1][3]--[0][4][5][2]
State Zip

Dun & Bradstreet Number .....[0][0]-[4][3][3]-[2][3][3][3]

EPA ID Number .....[O][H][D].[0][0][4][3][0][4][6][8][9]

Employer ID Number .....NA... [_][_][_][_][_][_][_][_]

Primary Standard Industrial Classification (SIC) Code .....[2][8][2][1]

Other SIC Code .....[_][_][_][_]

Other SIC Code .....[_][_][_][_]

1.10 Company Headquarters Identification

CBI Name [P][P][G]_[I][N][D][U][S][T][R][I][E][S]_[I][N][C]_____

[_] Address [O][N][E]_[P][P][G]_[P][L][A][C][E]_____
Street

[P][I][T][T][S][B][U][R][G][H]_____
City

[P][A] [1][5][2][2][2]--[_][_][_][_]
State Zip

Dun & Bradstreet Number .....[0][0]-[1][3][4]-[4][8][0][3]

Employer ID Number .....[2][5][0][1][3][0][1][8][0]

[_] Mark (X) this box if you attach a continuation sheet.

1.11 Parent Company Identification

NA

CBI Name [ ]

[ ] Address [ ] Street

[ ] City

[ ] State [ ]--[ ] Zip

Dun & Bradstreet Number .... [ ]-[ ]-[ ]

1.12 Technical Contact

CBI Name [STANLEY C OSLOSKY]

[ ] Title [SENIOR PRODUCT SAFETY ANALYST]

Address [260 KAPPA DRIVE] Street

[PITTSBURGH] City

[PA] State [15238]--[ ] Zip

Telephone Number .... [412]-[963]-[5817]

1.13 This reporting year is from .... [01] Mo. [88] Year to [12] Mo. [88] Year

[ ] Mark (X) this box if you attach a continuation sheet.

1.14 Facility Acquired -- If you purchased this facility during the reporting year, provide the following information about the seller: NA

CBI Name of Seller [__]

[__] Mailing Address [__]
Street

[__]
City

[__][__] [__][__][__][__][__]--[__][__][__][__]
State Zip

Employer ID Number .....[__][__][__][__][__][__][__][__][__]

Date of Sale .....[__][__] [__][__] [__][__]
Mo. Day Year

Contact Person [__]

Telephone Number .....[__][__][__]-[__][__][__]-[__][__][__][__]

1.15 Facility Sold -- If you sold this facility during the reporting year, provide the following information about the buyer:

NA

CBI Name of Buyer [__]

[__] Mailing Address [__]
Street

[__]
City

[__][__] [__][__][__][__][__]--[__][__][__][__]
State Zip

Employer ID Number .....[__][__][__][__][__][__][__][__][__]

Date of Purchase .....[__][__] [__][__] [__][__]
Mo. Day Year

Contact Person [__]

Telephone Number .....[__][__][__]-[__][__][__]-[__][__][__][__]

[__] Mark (X) this box if you attach a continuation sheet.

1.16 For each classification listed below, state the quantity of the listed substance that was manufactured, imported, or processed at your facility during the reporting year.

CBI
[ ]

Classification	Quantity (kg/yr)
Manufactured	0
Imported	0
Processed (include quantity repackaged)	1,103,400
Of that quantity manufactured or imported, report that quantity:	
In storage at the beginning of the reporting year	N/A
For on-site use or processing	N/A
For direct commercial distribution (including export)	N/A
In storage at the end of the reporting year	N/A
Of that quantity processed, report that quantity:	
In storage at the beginning of the reporting year	9990
Processed as a reactant (chemical producer)	1,103,400
Processed as a formulation component (mixture producer)	0
Processed as an article component (article producer)	0
Repackaged (including export)	0
In storage at the end of the reporting year	17,250

[ ] Mark (X) this box if you attach a continuation sheet.

PART C IDENTIFICATION OF MIXTURES

1.17 Mixture -- If the listed substance on which you are required to report is a mixture or a component of a mixture, provide the following information for each component chemical. (If the mixture composition is variable, report an average percentage of each component chemical for all formulations.)

CBI

[ ]

Component Name	Supplier Name	Average % Composition by Weight (specify precision, e.g., 45% ± 0.5%)
N/A	N/A	N/A
		Total 100%

[ ] Mark (X) this box if you attach a continuation sheet.

2.04 State the quantity of the listed substance that your facility manufactured, imported, or processed during the 3 corporate fiscal years preceding the reporting year in descending order.

CBI

[ ] Year ending ..... [1][2] [8][7] (Mo. / Year)

Quantity manufactured ..... 0 kg

Quantity imported ..... 0 kg

Quantity processed ..... 2,234,330 kg

Year ending ..... [1][2] [8][6] (Mo. / Year)

Quantity manufactured ..... 0 kg

Quantity imported ..... 0 kg

Quantity processed ..... 2019820 kg

Year ending ..... [1][2] [8][5] (Mo. / Year)

Quantity manufactured ..... 0 kg

Quantity imported ..... 0 kg

Quantity processed ..... 2022250 kg

2.05 Specify the manner in which you manufactured the listed substance. Circle all appropriate process types.

CBI

[ ]

Continuous process ..... N/A 1

Semicontinuous process ..... N/A 2

Batch process ..... N/A 3

[ ] Mark (X) this box if you attach a continuation sheet.

2.06 Specify the manner in which you processed the listed substance. Circle all
CBI appropriate process types.

[ ]

Continuous process 1

Semicontinuous process 2

Batch process ..... (3)

2.07 State your facility's name-plate capacity for manufacturing or processing the listed substance. (If you are a batch manufacturer or batch processor, do not answer this
CBI question.)

[ ]

Manufacturing capacity ..... N/A kg/yr

Processing capacity ..... N/A kg/yr

2.08 If you intend to increase or decrease the quantity of the listed substance manufactured, imported, or processed at any time after your current corporate fiscal year, estimate the increase or decrease based upon the reporting year's production
CBI volume.

[ ]

	Manufacturing Quantity (kg)	Importing Quantity (kg)	Processing Quantity (kg)
Amount of increase	0	0	
Amount of decrease	0	0	136,200

[ ] Mark (X) this box if you attach a continuation sheet.

2.09 For the three largest volume manufacturing or processing process types involving the listed substance, specify the number of days you manufactured or processed the listed substance during the reporting year. Also specify the average number of hours per day each process type was operated. (If only one or two operations are involved, list those.)

CBI

[ ]

	Days/Year	Average Hours/Day
Process Type #1 (The process type involving the largest quantity of the listed substance.)		
Manufactured	0	0
Processed	47	24
Process Type #2 (The process type involving the 2nd largest quantity of the listed substance.)		
Manufactured	0	0
Processed	24	24
Process Type #3 (The process type involving the 3rd largest quantity of the listed substance.)		
Manufactured	0	0
Processed	22	24

2.10 State the maximum daily inventory and average monthly inventory of the listed substance that was stored on-site during the reporting year in the form of a bulk chemical.

CBI

[ ]

Maximum daily inventory	33,000	kg
Average monthly inventory	16,500	kg

[ ] Mark (X) this box if you attach a continuation sheet.

2.11 Related Product Types -- List any byproducts, coproducts, or impurities present with the listed substance in concentrations greater than 0.1 percent as it is manufactured, imported, or processed. The source of byproducts, coproducts, or impurities means the source from which the byproducts, coproducts, or impurities are made or introduced into the product (e.g., carryover from raw material, reaction product, etc.).

CBI

[ ]

CAS No.	Chemical Name	Byproduct, Coproduct or Impurity[1]	Concentration (%) (specify ± % precision)	Source of Byproducts, Coproducts, or Impurities
NA	NA	NA	NA	NA

[1]Use the following codes to designate byproduct, coproduct, or impurity:

B = Byproduct
C = Coproduct
I = Impurity

Note: MSDS and Product information material for listed substance does not list any byproducts, impurities etc. in concentrations greater than 0.1%.

[ ] Mark (X) this box if you attach a continuation sheet.

2.12 Existing Product Types -- List all existing product types which you manufactured, imported, or processed using the listed substance during the reporting year. List the quantity of listed substance you use for each product type as a percentage of the total volume of listed substance used during the reporting year. Also list the quantity of listed substance used captively on-site as a percentage of the value listed under column b., and the types of end-users for each product type. (Refer to the instructions for further explanation and an example.)

CBI
[ ]

a. Product Types[1]	b. % of Quantity Manufactured, Imported, or Processed	c. % of Quantity Used Captively On-Site	d. Type of End-Users[2]
Urethane Crosslinker (K)	100	35	I

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/ Sensitizer
D = Inhibitor/Stabilizer/Scavenger/ Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additives
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additives
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

2.13 Expected Product Types -- Identify all product types which you expect to manufacture, import, or process using the listed substance at any time after your current corporate fiscal year. For each use, specify the quantity you expect to manufacture, import, or process for each use as a percentage of the total volume of listed substance used during the reporting year. Also list the quantity of listed substance used captively on-site as a percentage of the value listed under column b., and the types of end-users for each product type. (Refer to the instructions for further explanation and an example.)

CBI
[ ]

a. Product Types[1]	b. % of Quantity Manufactured, Imported, or Processed	c. % of Quantity Used Captively On-Site	d. Type of End-Users[2]
K Urethane Crosslinker	100%	35%	I

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/Sensitizer
D = Inhibitor/Stabilizer/Scavenger/Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additives
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additives
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

2.14 CBI [ ] Final Product -- Complete the following table for each type of final product manufactured, imported, or processed at your facility that contains the listed substance other than as an impurity.

a. Product Type[1]	b. Final Product's Physical Form[2]	c. Average % Composition of Listed Substance in Final Product	d. Type of End-Users[3]
K- Urethane Crosslinker	H	33	I

[1]Use the following codes to designate product types:

A = Solvent
B = Synthetic reactant
C = Catalyst/Initiator/Accelerator/Sensitizer
D = Inhibitor/Stabilizer/Scavenger/Antioxidant
E = Analytical reagent
F = Chelator/Coagulant/Sequestrant
G = Cleanser/Detergent/Degreaser
H = Lubricant/Friction modifier/Antiwear agent
I = Surfactant/Emulsifier
J = Flame retardant
K = Coating/Binder/Adhesive and additives
L = Moldable/Castable/Rubber and additives
M = Plasticizer
N = Dye/Pigment/Colorant/Ink and additives
O = Photographic/Reprographic chemical and additives
P = Electrodeposition/Plating chemicals
Q = Fuel and fuel additives
R = Explosive chemicals and additives
S = Fragrance/Flavor chemicals
T = Pollution control chemicals
U = Functional fluids and additives
V = Metal alloy and additives
W = Rheological modifier
X = Other (specify) _____

[2]Use the following codes to designate the final product's physical form:

A = Gas
B = Liquid
C = Aqueous solution
D = Paste
E = Slurry
F1 = Powder
F2 = Crystalline solid
F3 = Granules
F4 = Other solid
G = Gel
(H) = Other (specify) Polymer Solution

[3]Use the following codes to designate the type of end-users:

I = Industrial
CM = Commercial
CS = Consumer
H = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

2.15 CBI Circle all applicable modes of transportation used to deliver bulk shipments of the listed substance to off-site customers.

[ ] Truck ..... (1)

Railcar 2

Barge, Vessel 3

Pipeline 4

Plane 5

Other (specify) _____ 6

2.16 CBI Customer Use -- Estimate the quantity of the listed substance used by your customers or prepared by your customers during the reporting year for use under each category of end use listed (i-iv).

[ ]

Category of End Use

i. Industrial Products

Chemical or mixture ..... 1,103,400 kg/yr

Article ..... 0 kg/yr

ii. Commercial Products

Chemical or mixture ..... 0 kg/yr

Article ..... 0 kg/yr

iii. Consumer Products

Chemical or mixture ..... 0 kg/yr

Article ..... 0 kg/yr

iv. Other

Distribution (excluding export) ..... 0 kg/yr

Export ..... 0 kg/yr

Quantity of substance consumed as reactant ..... 0 kg/yr

Unknown customer uses ..... 0 kg/yr

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 3 PROCESSOR RAW MATERIAL IDENTIFICATION

PART A GENERAL DATA

3.01 Specify the quantity purchased and the average price paid for the listed substance for each major source of supply listed. Product trades are treated as purchases.
CBI The average price is the market value of the product that was traded for the listed substance.
[✓]

Source of Supply	Quantity (kg)	Average Price ($/kg)
The listed substance was manufactured on-site.		
The listed substance was transferred from a different company site.		
The listed substance was purchased directly from a manufacturer or importer.	2,233,680	$2.2/kg
The listed substance was purchased from a distributor or repackager.		
The listed substance was purchased from a mixture producer.		

3.02 Circle all applicable modes of transportation used to deliver the listed substance to
CBI your facility.
[ ]

Truck	(1)
Railcar	2
Barge, Vessel	3
Pipeline	4
Plane	5
Other (specify) _____	6

[ ] Mark (X) this box if you attach a continuation sheet.

3.03 CBI

a. Circle all applicable containers used to transport the listed substance to your facility.

[ ]

Bags 1

Boxes 2

Free standing tank cylinders 3

Tank rail cars 4

Hopper cars 5

Tank trucks ..... (6)

Hopper trucks 7

Drums 8

Pipeline 9

Other (specify) _____ 10

b. If the listed substance is transported in pressurized tank cylinders, tank rail cars, or tank trucks, state the pressure of the tanks.

Tank cylinders ..... N/A mmHg

Tank rail cars ..... N/A mmHg

Tank trucks ..... NA mmHg

[ ] Mark (X) this box if you attach a continuation sheet.

PART B RAW MATERIAL IN THE FORM OF A MIXTURE

3.04 If you obtain the listed substance in the form of a mixture, list the trade name(s) of the mixture, the name of its supplier(s) or manufacturer(s), an estimate of the
CBI average percent composition by weight of the listed substance in the mixture, and the amount of mixture processed during the reporting year.
[ ]

Trade Name	Supplier or Manufacturer	Average % Composition by Weight (specify ± % precision)	Amount Processed (kg/yr)
NA	NA	NA	NA

[ ] Mark (X) this box if you attach a continuation sheet.

PART C RAW MATERIAL VOLUME

3.05 CBI [ ] State the quantity of the listed substance used as a raw material during the reporting year in the form of a class I chemical, class II chemical, or polymer, and the percent composition, by weight, of the listed substance.

	Quantity Used (kg/yr)	% Composition by Weight of Listed Substance in Raw Material (specify ± % precision)
Class I chemical	1,103,400	100
Class II chemical		
Polymer		

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 4 PHYSICAL/CHEMICAL PROPERTIES

General Instructions:

If you are reporting on a mixture as defined in the glossary, reply to questions in Section 4 that are inappropriate to mixtures by stating "NA -- mixture."

For questions 4.06-4.15, if you possess any hazard warning statement, label, MSDS, or other notice that addresses the information requested, you may submit a copy or reasonable facsimile in lieu of answering those questions which it addresses.

PART A PHYSICAL/CHEMICAL DATA SUMMARY

4.01 Specify the percent purity for the three major[1] technical grade(s) of the listed substance as it is manufactured, imported, or processed. Measure the purity of the substance in the final product form for manufacturing activities, at the time you import the substance, or at the point you begin to process the substance.

CBI

[ ]

	Manufacture	Import	Process
Technical grade #1	NA % purity	NA % purity	99.7 % purity
Technical grade #2	NA % purity	NA % purity	NA % purity
Technical grade #3	NA % purity	NA % purity	NA % purity

[1]Major = Greatest quantity of listed substance manufactured, imported or processed.

4.02 Submit your most recently updated Material Safety Data Sheet (MSDS) for the listed substance, and for every formulation containing the listed substance. If you possess an MSDS that you developed and an MSDS developed by a different source, submit your version. Indicate whether at least one MSDS has been submitted by circling the appropriate response.

Yes ..... (1)

No 2

Indicate whether the MSDS was developed by your company or by a different source.

Your company 1

Another source 2

[X] Mark (X) this box if you attach a continuation sheet.

Olin

OCEAN® Network
EMERGENCY PHONE 1-800-OLIN-911

MATERIAL SAFETY DATA

RECEIVED JUN 1 1987

SECTION I - IDENTIFICATION

MSDS FILE 563

CHEMICAL NAME & SYNONYMS Toluene Diisocyanate 80-20		KQX-747
CHEMICAL FAMILY Isocyanate	FORMULA $C_9H_6N_2O_2$	PRODUCT TDI 80-20
DESCRIPTION Clear colorless to pale yellow liquid with sharp pungent odor		CAS NO. 26471-62-5

SECTION II - NORMAL HANDLING PROCEDURES

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Do not get in eyes, on skin or clothing. Don't take internally. Upon contact with skin or eyes, wash off with water. Avoid breathing mist or vapor. Protect against physical damage. Store in a cool, dry, well-ventilated place, away from areas where a fire hazard may be acute. Outside or detached storage is preferred. Blanket storage tanks with inert gas (nitrogen) or dry air. Separate from oxidizing materials.

PROTECTIVE EQUIPMENT	VENTILATION REQUIREMENTS
EYES Goggles GLOVES Rubber, NBR or PVA OTHER Coveralls, impervious footwear	As required to keep airborne concentrations below TLV

SECTION III - HAZARDOUS INGREDIENTS

BASIC MATERIAL	OSHA PEL	LD50	LC50	SIGNIFICANT EFFECTS
Toluene-2,4-diisocyanate	0.02 ppm ceiling	5.8 g/kg (rat)	10 ppm/4 hrs (mouse) (mouse)	Skin, eye, mucous membrane irritation. Pulmonary irritant. Allergic sensitization to skin and respiratory tract. May cause asthma attacks.
Toluene-2,6-diisocyanate	None established	No data	11 ppm/4 hrs-mouse	Irritation

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT 270°F COC METHOD	OSHA CLASSIFICATION Not Regulated (Ignitable)	FLAMMABLE EXPLOSIVE LIMIT	LOWER	UPPER
			0.9%	9.5%

EXTINGUISHING MEDIA Water, carbon dioxide or dry chemical. Use water to keep the exposed containers cool.

SPECIAL FIRE HAZARD & FIRE FIGHTING PROCEDURES Water spray should be used to cool fire exposed containers and/or to disperse unignited vapors. Use NIOSH/MSHA approved positive pressure self-contained breathing apparatus when any material is involved in a fire.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
0.005 ppm TWA, 0.02 ppm STEL - 2.4 TDI (ACGIH 1986-87)

SYMPTOMS OF OVER EXPOSURE May cause irritation to eyes, throat, lungs, stomach, skin. Allergic sensitization to skin and respiratory tract. May cause asthma attacks

EMERGENCY FIRST-AID PROCEDURES

SKIN Flush thoroughly with water for 15 minutes, call a physician.

EYES Flush thoroughly with water for 15 minutes, call a physician.

INGESTION Drink large quantities of water. Do not induce vomiting. Call a physician.

INHALATION Remove victim to fresh air. Notify physician of exposure. If breathing is labored, see a physician.

PRODUCT CODE 898864 CHEMICAL NAME TDI 80-20

SECTION VI - TOXICOLOGY (PRODUCT)

ACUTE ORAL LD 50
5.8 g/kg (rats)
ACUTE DERMAL LD 50
> 2 g/kg (rabbits)
ACUTE INHALATION LC 50
10 ppm/4 hrs (mouse)

CARCINOGENICITY Oral Exposure-Positive NTP Bioassay
MUTAGENICITY Not known to be mutagenic
EYE IRRITATION Irritation and/or burns
PRIMARY SKIN IRRITATION
Irritation and/or burns

PRINCIPAL ROUTES OF ABSORPTION
Inhalation, dermal

EFFECTS OF ACUTE EXPOSURE May cause irritation to lungs, eyes, throat, stomach, skin. Allergic sensitization of skin and respiratory tract. Corneal injury may occur.

EFFECTS OF CHRONIC EXPOSURE Damage/allergic sensitization to lungs. Inhalation studies indicate not carcinogenic. Carcinogenic risk from industrial use is not significant.

SECTION VII - SPILL AND LEAKAGE PROCEDURES (CONTROL PROCEDURES)

ACTION FOR MATERIAL RELEASE OR SPILL
Wear NIOSH/MSHA approved positive pressure supplied air respirator. Follow OSHA regulations for respirator use (see 29 CFR 1910.134). Wear goggles, coveralls and impervious gloves and boots. Add dry non-combustible absorbent, sweep up material and place in an approved DOT container. Add an equal amount of neutralizing solution to the container (90-95% water, 5-10% ammonia). Clean remaining surfaces with neutralizing solution and add this to container. Isolate container in a well-ventilated place and do not seal for 24 hrs. Ammonia vapors may be generated until solution is neutralized. Wash all contaminated clothing before reuse. In the event of a large spill use the telephone number shown on the front of this sheet.

TRANSPORTATION EMERGENCY, CONTACT CHEMTREC 800-424-9300

WASTE DISPOSAL METHOD
Dispose of contaminated product, empty containers and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate Federal, State and local regulatory agencies to ascertain proper disposal procedures.

SECTION VIII - SHIPPING DATA

D.O.T.	Toluene diisocyanate Poison B UN 2078

SECTION IX - REACTIVITY DATA

STABLE X UNSTABLE AT____C ____ F	HAZARDOUS POLYMERIZATION	MAY OCCUR	X
		WILL NOT OCCUR	

CONDITIONS TO AVOID
Water or incompatible materials in a closed system, excess heat
INCOMPATIBILITY(MATERIAL TO AVOID)
Acids, bases and alcohols, surface active materials
HAZARDOUS DECOMPOSITION PRODUCTS
Carbon monoxide, nitrogen oxides, hydrogen cyanide

SECTION X - PHYSICAL DATA

MELTING POINT 53-56°F	VAPOR PRESSURE .01mmHg, 20°C	VOLATILES No data
BOILING POINT 484°F	SOLUBILITY IN WATER Insoluble	EVAPORATION RATE No data
SPECIFIC GRAVITY(H2O=1) 1.22	PH No data	VAPOR DENSITY(AIR=1) 6.0

INFORMATION: FURNISHED TO 69925590 FURNISHED BY DATE MAY 21, 1987

ATTN: DEPT HANDLING MATL SAFETY DATA SHEETS
PPG INDUSTRIES INC
BOX 457
CIRCLEVILLE OH 43113

Department of Environmental Hygiene and Toxicology
(203) 789-5436

Olin CORPORATION
120 Long Ridge Road, Stamford, Connecticut 06904
OCEAN® Network
EMERGENCY PHONE 1-800-OLIN-911

4.03 Submit a copy or reasonable facsimile of any hazard information (other than an MSDS) that is provided to your customers/users regarding the listed substance or any formulation containing the listed substance. Indicate whether this information has been submitted by circling the appropriate response.

Yes ..... NA 1

No 2

4.04 For each activity that uses the listed substance, circle all the applicable number(s) corresponding to each physical state of the listed substance during the activity listed. Physical states for importing and processing activities are determined at the time you import or begin to process the listed substance. Physical states for manufacturing, storage, disposal and transport activities are determined using the final state of the product.

CBI

[ ]

	Physical State				
Activity	Solid	Slurry	Liquid	Liquified Gas	Gas
Manufacture NA	1	2	3	4	5
Import NA	1	2	3	4	5
Process	1	2	(3)	4	5
Store	1	2	(3)	4	5
Dispose	(1)	2	3	4	5
Transport NA	1	2	3	4	5

[ ] Mark (X) this box if you attach a continuation sheet.

4.05 Particle Size -- If the listed substance exists in particulate form during any of the following activities, indicate for each applicable physical state the size and the percentage distribution of the listed substance by activity. Do not include particles ≥10 microns in diameter. Measure the physical state and particle sizes for importing and processing activities at the time you import or begin to process the listed substance. Measure the physical state and particle sizes for manufacturing storage, disposal and transport activities using the final state of the product.

CBI

[ ]

Physical State		Manufacture	Import	Process	Store	Dispose	Transport
Dust	<1 micron	NA	NA	NA	NA	NA	NA
	1 to <5 microns						
	5 to <10 microns						
Powder	<1 micron						
	1 to <5 microns						
	5 to <10 microns						
Fiber	<1 micron						
	1 to <5 microns						
	5 to <10 microns						
Aerosol	<1 micron						
	1 to <5 microns						
	5 to <10 microns						

[ ] Mark (X) this box if you attach a continuation sheet.

REFERENCES IN PARENTHESES

SECTION 5 ENVIRONMENTAL FATE

PART A RATE CONSTANTS AND TRANSFORMATION PRODUCTS

5.01 Indicate the rate constants for the following transformation processes.

a. Photolysis:

Absorption spectrum coefficient (peak) .... 871 (1/M cm) at 284 nm (1)

Reaction quantum yield, ϕ ..... No information at _____ nm

Direct photolysis rate constant, k_p, at ... $<1.2 \times 10^{-3}$ 1/hr when NO_2 ~~kaximum~~ photolysis rate is 0.37/hr (2)

b. Oxidation constants at 25°C:

For $^1O_2$ (singlet oxygen), k_{ox} ..... No information 1/M hr

For RO_2 (peroxy radical), k_{ox} ..... No information 1/M hr

c. Five-day biochemical oxygen demand, BOD_5 ... Not applicable due to reaction with water mg/l

d. Biotransformation rate constant:

For bacterial transformation in water, k_b ... No oxygen consumed 1/hr

Specify culture ..... in modified MITI test (3)

e. Hydrolysis rate constants:

For base-promoted process, k_B ..... No information 1/M hr

For acid-promoted process, k_A ..... No information 1/M hr

For neutral process, k_N ..... No information 1/hr

f. Chemical reduction rate (specify conditions) Not expected

g. Other (such as spontaneous degradation) ... Polyurea formation under hydrolytic conditions. (4)

[ ] Mark (X) this box if you attach a continuation sheet.

PART B PARTITION COEFFICIENTS

5.02 a. Specify the half-life of the listed substance in the following media.

Media	Half-life (specify units)
Groundwater	<< 1 day in water solution (4)
Atmosphere	26 hr (2)
Surface water	<< 1 day in water solution (4)
Soil	< 1 day (4)

b. Identify the listed substance's known transformation products that have a half-life greater than 24 hours.

CAS No.	Name	Half-life (specify units)	Media
~~Not found~~	Polyurea	> 1 yr	in water and soil (4)
95-80-7	2,4-Toluene diamine	< 1 day	in biological waste-water treatment plant (4)
823-40-5	2,6-Toluene diamine	< 1 day	
5206-52-0	Urea, N,N'-bis(3-isocyanato-4-methylphenyl)-	Unknown half-life	(5,6)

5.03 Specify the octanol-water partition coefficient, K_{ow} ... reacts with both at 25°C

Method of calculation or determination ..... octanol and water

5.04 Specify the soil-water partition coefficient, K_d ..... reacts with water at 25°C

Soil type .....

5.05 Specify the organic carbon-water partition coefficient, K_{oc} ..... reacts with water at 25°C

5.06 Specify the Henry's Law Constant, H ..... reacts with water atm-m^3/mole

☐ Mark (X) this box if you attach a continuation sheet.

5.07 List the bioconcentration factor (BCF) of the listed substance, the species for which it was determined, and the type of test used in deriving the BCF.

Bioconcentration Factor	Species	Test[1]
None detected	Moina macrocopa Straus	Not defined (4)
None detected	Cyprinum carpio	Not defined (4)

[1]Use the following codes to designate the type of test:

F = Flowthrough
S = Static

(1) Phillips and Nachod, eds., Organic Electronic Spectral Data, Vol IV, pg. 200.

(2) K. H. Becker, V. Bastian and Th. Klein, The reactions of toluenediisocyanate, toluenediamine and methylenedianiline under simulated atmospheric conditions, J. Photochem. and Photobiol., A: Chemistry, 45 (1988) 195-205.

(3) N. Caspers, B. Hamburger, R. Kanne and Waklebert, Ecotoxicity of TDI, MDI, TDA and MDA, Report to the International Isocyanate Institute, E-CE-41, 1986. Quoted in D. S. Gilbert, Fate of TDI and MDI in Air, Soil and Water, Polyurethanes World Congress 1987, Proceedings of the SPI/FSK.

(4) F. K. Brochhagen and B. M. Grieveson, Environmental aspects of isocyanates in water and soil, Cellular Polymers, 3 (1984) 11-17.

(5) K. Marcali, Microdetermination of toluenediisocyanate in atmosphere, Anal. Chem. 29 (1957) 552-558.

(6) G.A.Campbell, T.J.Dearlove and W.C.Meluch, Di(isocyanatotolyl)urea, U.S. Patent 3,906,019 (1975) ,Chem. Abs. 84:5645h.

[ ] Mark (X) this box if you attach a continuation sheet.

6.04 For each market listed below, state the quantity sold and the total sales value of
CBI the listed substance sold or transferred in bulk during the reporting year.

[ ]

Market	Quantity Sold or Transferred (kg/yr)	Total Sales Value ($/yr)
Retail sales	NA	NA
Distribution -- Wholesalers		
Distribution -- Retailers		
Intra-company transfer		
Repackagers		
Mixture producers		
Article producers		
Other chemical manufacturers or processors		
Exporters		
Other (specify) _____		

6.05 Substitutes -- List all known commercially feasible substitutes that you know exist for the listed substance and state the cost of each substitute. A commercially feasible substitute is one which is economically and technologically feasible to use
CBI in your current operation, and which results in a final product with comparable performance in its end uses.

[ ]

Substitute	Cost ($/kg)
No Substitutes Exist	

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 7 MANUFACTURING AND PROCESSING INFORMATION

General Instructions:

For questions 7.04-7.06, provide a separate response for each process block flow diagram provided in questions 7.01, 7.02, and 7.03. Identify the process type from which the information is extracted.

PART A MANUFACTURING AND PROCESSING PROCESS TYPE DESCRIPTION

7.01 In accordance with the instructions, provide a process block flow diagram showing the major (greatest volume) process type involving the listed substance.

CBI

[ ] Process type ..... _____

See Attached Flow diagram

[X] Mark (X) this box if you attach a continuation sheet.

7.03 In accordance with the instructions, provide a process block flow diagram showing all process emission streams and emission points that contain the listed substance and which, if combined, would total at least 90 percent of all facility emissions if not treated before emission into the environment. If all such emissions are released from one process type, provide a process block flow diagram using the instructions for question 7.01. If all such emissions are released from more than one process type, provide a process block flow diagram showing each process type as a separate block.

CBI

[ ] Process type ..... _____

See Attached Flow diagrams, 1 for each major process.

[X] Mark (X) this box if you attach a continuation sheet.

7.04 Describe the typical equipment types for each unit operation identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... I, II, III

Unit Operation ID Number	Typical Equipment Type	Operating Temperature Range (°C)	Operating Pressure Range (mm Hg)	Vessel Composition
7.1	Solid Feeder	Ambient	Atmos	SS
7.2	Weigh Tank	Ambient	Atmos	SS
7.3	Storage Tank	Ambient	Atmos	SS
7.4	Cooling Exchanger	25-120	Atmos	SS
7.5	Reactor	25-120	Atmos	SS
7.6	Condenser	20-120	Atmos	SS
7.7	Scrubber	10-50	Atmos	SS
7.8	Collection Tank	Ambient	Atmos	CS
7.9	Blend Tank	25-120	Atmos	SS
7.10	Condenser	20-120	Atmos	SS
7.11	Cuno Filter	38-80	Atmos	CS

[ ] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type I

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7A	Raw Material	SO	130,634
7B	Raw Material	OL	422,970
7C	Raw Material	OL	422,970
7D	Raw Material	SO	130,634
7E	Raw Material	OL	506,526
7F	Raw Material	OL	218,813
7G	Raw Material	OL	45
7H	Raw Material	OL	34

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type I

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7A	TMP	>98.5% (A)(W)	NA	NA
7B	Ethylene Glycol Monohexyl Ether	100% (A)(W)	NA	NA
7C	Ethylene Glycol Monohexyl Ether	100% (A)(W)	NA	NA
7D	TMP	>98.5% (A)(W)	NA	NA
7E	TDI	100% (A)(W)	NA	NA
7F	MIBK	100% (A)(W)	NA	NA
7G	Dibutyltin Dilaurate	>95% (A)(W)	NA	NA
7H	TDI	100% (A)(W)	NA	NA
7I	TDI	0.016% (E)(W)	NA	NA
	Nitrogen	99.984% (E)(W)	NA	NA
* 7J	TDI	0.016% (E)(W)	NA	NA
	Nitrogen	99.984% (E)(W)	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

PART A RESIDUAL TREATMENT PROCESS DESCRIPTION

8.01 In accordance with the instructions, provide a residual treatment block flow diagram which describes the treatment process used for residuals identified in question 7.01.

CBI

[ ] Process type ..... PRODUCTION OF I

[X] Mark (X) this box if you attach a continuation sheet.

8.04 Describe the typical equipment types for each unit operation identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... _____

Unit Operation ID Number (as assigned in questions 8.01, 8.02, or 8.03)	Typical Equipment Type
8.1	55-gallon steel drum
8.2	Storage Tank
8.3	Rotating Biological Contactors
8.4	Storge Tank
8.5	Rotary Kiln Incinerator.

[ ] Mark (X) this box if you attach a continuation sheet.

PART B RESIDUAL GENERATION AND CHARACTERIZATION

8.05 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Production of TI

a. Stream ID Code	b. Type of Hazardous Waste[1]	c. Physical State of Residual[2]	d. Known Compounds[3]	e. Concentrations (% or ppm)[4,5,6]	f. Other Expected Compounds	g. Estimated Concentrations (% or ppm)
7H	R, T	O.L. (7.3)	TDI	100% (E) (W)		
7DD		SO (7.11)	Filter media	25% (E) (W)		
			MIBK	21% (E) (W)		
			N-BuOH	2% (E) (W)		
			Polymer	52% (E) (W)		
7S*	I	OL (7.8)	MIBK	100% (E) (W)		
7P*		AL (7.7)	WATER	>99.99% (E) (W)		
			UREA	4 ppm (E) (W)		

8.05 continued below

[X] Mark (X) this box if you attach a continuation sheet.

8.05 (continued)

[1]Use the following codes to designate the type of hazardous waste:

I = Ignitable
C = Corrosive
R = Reactive
E = EP toxic
T = Toxic
H = Acutely hazardous

[2]Use the following codes to designate the physical state of the residual:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

8.05 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

3.05 (continued)

NONE

[3]For each additive package introduced into a process stream, specify the compounds that are present in each additive package, and the concentration of each component. Assign an additive package number to each additive package and list this number in column d. (Refer to the instructions for further explanation and an example. Refer to the glossary for the definition of additive package.)

Additive Package Number	Components of Additive Package	Concentrations (% or ppm)
1	NA	NA
	NA	
	NA	
2	NA	
	NA	
	NA	
3	NA	
	NA	
	NA	
4	NA	
	NA	
	NA	
5	NA	
	NA	
	NA	

[4]Use the following codes to designate how the concentration was determined:

A = Analytical result
E = Engineering judgement/calculation

8.05 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

8.05 (continued)

[5]Use the following codes to designate how the concentration was measured:

V = Volume
W = Weight

[6]Specify the analytical test methods used and their detection limits in the table below. Assign a code to each test method used and list those codes in column e.

Code	Method	Detection Limit (± ug/l)
1	NA	NA
2		
3		
4		
5		
6		

[ ] Mark (X) this box if you attach a continuation sheet.

8.06 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Production of I

a. Stream ID Code	b. Waste Description Code[1]	c. Management Method Code[2]	d. Residual Quantities (kg/yr)	e. Management of Residual (%) On-Site	e. Management of Residual (%) Off-Site	f. Costs for Off-Site Management (per kg)	g. Changes in Management Methods
7H	A08	S	34	100%			NONE
		1TR					
		1WT(a)					
		54WT(a)					
7DD	B82	S	329	100%			NONE
		1ST					
		3I					
7S**	B60	S	53	100%			NONE
		1ST					
		2ST					
		3I					
7P*	A05	S	23,000	100%			NONE
		1WT(a)					
		54WT(a)					

[1]Use the codes provided in Exhibit 8-1 to designate the waste descriptions.

[2]Use the codes provided in Exhibit 8-2 to designate the management methods

[X] Mark (X) this box if you attach a continuation sheet.

8.22 Describe the combustion chamber design parameters for each of the three largest (by capacity) incinerators that are used on-site to burn the residuals identified in your process block or residual treatment block flow diagram(s).

CBI

[ ]

Incinerator	Combustion Chamber Temperature (°C)		Location of Temperature Monitor		Residence Time In Combustion Chamber (seconds)	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
1						
2						
3						

Indicate if Office of Solid Waste survey has been submitted in lieu of response by circling the appropriate response.

Yes 1

No 2

8.23 Complete the following table for the three largest (by capacity) incinerators that are used on-site to burn the residuals identified in your process block or residual treatment block flow diagram(s).

CBI

[ ]

Incinerator	Air Pollution Control Device[1]	Types of Emissions Data Available
1	E, S (WET)	NO_x, SO_2, CO, CO_2, POHC's
2		
3		

Indicate if Office of Solid Waste survey has been submitted in lieu of response by circling the appropriate response.

Yes 1

No 2

[1]Use the following codes to designate the air pollution control device:

S = Scrubber (include type of scrubber in parenthesis)
E = Electrostatic precipitator
O = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

PART A EMPLOYMENT AND POTENTIAL EXPOSURE PROFILE

9.01 Mark (X) the appropriate column to indicate whether your company maintains records on the following data elements for hourly and salaried workers. Specify for each data element the year in which you began maintaining records and the number of years the records for that data element are maintained. (Refer to the instructions for further explanation and an example.)

CBI
[ ]

Data Element	Data are Maintained for: Hourly Workers	Salaried Workers	Year in Which Data Collection Began	Number of Years Records Are Maintained
Date of hire	X	X	1962	PERMANENT
Age at hire	X	X	1962	"
Work history of individual before employment at your facility	X	X	1962	THREE YEARS AFTER TERMINATI
Sex	X	X	1962	PERMANENT
Race	X	X	1962	"
Job titles	X	X	1962	THREE YEARS AFTER TERMINATI
Start date for each job title	X	X	1962	"
End date for each job title	X	X	1962	"
Work area industrial hygiene monitoring data	X	X	1976	EMPLOYMENT + 30 YEARS
Personal employee monitoring data	X	X	1962	EMPLOYMENT + 30 YEARS
Employee medical history	X	X	1962	"
Employee smoking history	X	X	1962	"
Accident history	X	X	1969	60 YEARS
Retirement date	X	X	1962	PERMANENT
Termination date	X	X	1962	"
Vital status of retirees	X	X	1962	"
Cause of death data	X	X	1962	"

[ ] Mark (X) this box if you attach a continuation sheet.

9.02 In accordance with the instructions, complete the following table for each activity in which you engage.

CBI

[ ]

a. Activity	b. Process Category	c. Yearly Quantity (kg)	d. Total Workers	e. Total Worker-Hours
Manufacture of the listed substance	Enclosed	NA	NA	NA
	Controlled Release	NA	NA	NA
	Open	NA	NA	NA
On-site use as reactant	Enclosed	NA	NA	NA
	Controlled Release	1,103,400	6	43200
	Open	NA	NA	NA
On-site use as nonreactant	Enclosed	NA	NA	NA
	Controlled Release	NA	NA	NA
	Open	NA	NA	NA
On-site preparation of products	Enclosed	NA	NA	NA
	Controlled Release	NA	NA	NA
	Open	NA	NA	NA

[ ] Mark (X) this box if you attach a continuation sheet.

9.03 Provide a descriptive job title for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance.

CBI

[ ]

Labor Category	Descriptive Job Title
(A)	Reactor Process Controlman / Operator
(B)	Process Floater
(C)	Receiving Warehouseman
(D)	Production Supervisor
(E)	Receiving Supervisor
F	
G	
H	
I	
J	

[ ] Mark (X) this box if you attach a continuation sheet.

9.04 In accordance with the instructions, provide your process block flow diagram(s) and indicate associated work areas.

CBI

[ ] Process type ..... _____

See Attachment

[X] Mark (X) this box if you attach a continuation sheet.

9.05 Describe the various work area(s) shown in question 9.04 that encompass workers who may potentially come in contact with or be exposed to the listed substance. Add any additional areas not shown in the process block flow diagram in question 7.01 or 7.02. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... _____

Work Area ID	Description of Work Areas and Worker Activities
1	T/W Unloading, Storage Tank area. Worker monitors unloading Process & Transfe
2	2nd Floor raw material charge area. Solid and liquid raw material additions are made to the reactor by workers.
3	1st Floor reactor area - Workers monitor 2nd stage reactor conditions and batch progress.
4	Filter and Transfer area - Workers Filter and transfer finished product from process area to storage tank.
5	Control room - Workers monitor batch variables like temperature, feed rates and pressure gauges.

[ ] Mark (X) this box if you attach a continuation sheet.

9.06 Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type .... I, II, III

Work area 1

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
A	NA	NA	NA	NA	NA
B	NA	NA	NA	NA	NA
C	2	Inhalation	OL	B	60
D	NA	NA	NA	NA	NA
E	NA	NA	NA	NA	NA

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

[X] Mark (X) this box if you attach a continuation sheet.

9.07 For each labor category represented in question 9.06, indicate the 8-hour Time Weighted Average (TWA) exposure levels and the 15-minute peak exposure levels. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... I, II, III

Work area 1

Labor Category	8-hour TWA Exposure Level (ppm, mg/m^3, other-specify)	25 ~~15~~-Minute Peak Exposure Level (ppm, mg/m^3, other-specify)
A	NA	
B	NA	> Impenger sampling
C	NA	using nitro -
D	NA	results in ppb
E	NA	level. All results
		less than detectable
		limits.
Same Results for all labor		Categories.

[ ] Mark (X) this box if you attach a continuation sheet.

PART B WORK PLACE MONITORING PROGRAM

9.08 If you monitor worker exposure to the listed substance, complete the following table.

CBI

[ ]

Sample/Test	Work Area ID	Testing Frequency (per year)	Number of Samples (per test)	Who Samples[1]	Analyzed In-House (Y/N)	Number of Years Records Maintained
Personal breathing zone						
General work area (air)	1,2,3,4&5	4	2	D	N	Until termination of employment +3 years.
Wipe samples						
Adhesive patches						
Blood samples						
Urine samples						
Respiratory samples						
Allergy tests						
Other (specify)						
Other (specify)						
Other (specify)						

[1]Use the following codes to designate who takes the monitoring samples:

A = Plant industrial hygienist
B = Insurance carrier
C = OSHA consultant
(D) = Other (specify) Plant Industrial Hygene Specialist

[ ] Mark (X) this box if you attach a continuation sheet.

9.09 CBI For each sample type identified in question 9.08, describe the type of sampling and analytical methodology used for each type of sample.

[ ]	Sample Type	Sampling and Analytical Methodology
	Impenger Sampling	Impenger sampling with "nitro reagent"
	General work area	25 minute duration at 1.0 liter
		per minute. Analytical Methology: HPLC

9.10 If you conduct personal and/or ambient air monitoring for the listed substance, specify the following information for each equipment type used.

CBI

[ ]	Equipment Type[1]	Detection Limit[2]	Manufacturer	Averaging Time (hr)	Model Number
	H	ppb	MSA	25 min	S

[1]Use the following codes to designate personal air monitoring equipment types:

A = Passive dosimeter
B = Detector tube
C = Charcoal filtration tube with pump
D = Other (specify) _____

Use the following codes to designate ambient air monitoring equipment types:

E = Stationary monitors located within work area
F = Stationary monitors located within facility
G = Stationary monitors located at plant boundary
(H) = Mobile monitoring equipment (specify) MSA Impenger - model #S
I = Other (specify) _____

[2]Use the following codes to designate detection limit units:

A = ppm
B = Fibers/cubic centimeter (f/cc)
C = Micrograms/cubic meter (μ/m^3)

[ ] Mark (X) this box if you attach a continuation sheet.

9.11 If you conduct routine medical tests for monitoring the health effects of exposure to the listed substance, specify the type and frequency of the tests.

CBI

[ ]	Test Description	Frequency (weekly, monthly, yearly, etc.)
	Yearly physical exam by Plant physician	yearly

[ ] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... All

Work area 1

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust	Y	1987	N	
General dilution	Y	1966	N	
Other (specify)				
Vessel emission controls	Y	1966	N	
Mechanical loading or packaging equipment				
Other (specify)				

[X] Mark (X) this box if you attach a continuation sheet.

9.13 Describe all equipment or process modifications you have made within the 3 years prior to the reporting year that have resulted in a reduction of worker exposure to the listed substance. For each equipment or process modification described, state the percentage reduction in exposure that resulted. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... _____

Work area ..... _____

Equipment or Process Modification	Reduction in Worker Exposure Per Year (%)
NA - No exposures	

[ ] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... I, II, III

Work area 1

Equipment Types	Wear or Use (Y/N)
Respirators (Full Face)	Y
Safety goggles/glasses	Y
Face shields	N
Coveralls	Y (Impervious)
Bib aprons	
Chemical-resistant gloves	Y
Other (specify)	
Impervious Boots & Gloves	Y

[X] Mark (X) this box if you attach a continuation sheet.

9.15 If workers use respirators when working with the listed substance, specify for each process type, the work areas where the respirators are used, the type of respirators used, the average usage, whether or not the respirators were fit tested, and the type and frequency of the fit tests. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... I, II, III

Work Area	Respirator Type	Average Usage[1]	Fit Tested (Y/N)	Type of Fit Test[2]	Frequency of Fit Tests (per year)
1	Fresh Air Supplied	E	NA	NA	NA
2,3	½ face - Negative Pressure with organic cartridges	A	Y	QL	1

[1]Use the following codes to designate average usage:

A = Daily
B = Weekly
C = Monthly
D = Once a year
E = Other (specify) 2 times/week

[2]Use the following codes to designate the type of fit test:

QL = Qualitative
QT = Quantitative

[ ] Mark (X) this box if you attach a continuation sheet.

SECTION 10 ENVIRONMENTAL RELEASE

General Instructions:

Complete Part E (questions 10.23-10.35) for each non-routine release involving the listed substance that occurred during the reporting year. Report on all releases that are equal to or greater than the listed substance's reportable quantity value, RQ, unless the release is federally permitted as defined in 42 U.S.C. 9601, or is specifically excluded under the definition of release as defined in 40 CFR 302.3(22). Reportable quantities are codified in 40 CFR Part 302. If the listed substance is not a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and, thus, does not have an RQ, then report releases that exceed 2,270 kg. If such a substance however, is designated as a CERCLA hazardous substance, then report those releases that are equal to or greater than the RQ. The facility may have answered these questions or similar questions under the Agency's Accidental Release Information Program and may already have this information readily available. Assign a number to each release and use this number throughout this part to identify the release. Releases over more than a 24-hour period are not single releases, i.e., the release of a chemical substance equal to or greater than an RQ must be reported as a separate release for each 24-hour period the release exceeds the RQ.

For questions 10.25-10.35, answer the questions for each release identified in question 10.23. Photocopy these questions and complete them separately for each release.

PART A GENERAL INFORMATION

10.01 Where is your facility located? Circle all appropriate responses.

CBI

[ ] Industrial area 1

Urban area 2

Residential area 3

Agricultural area ..... (4)

Rural area 5

Adjacent to a park or a recreational area 6

Within 1 mile of a navigable waterway 7

Within 1 mile of a school, university, hospital, or nursing home facility ..... (8)

Within 1 mile of a non-navigable waterway ..... (9)

Other (specify) _____ 10

[ ] Mark (X) this box if you attach a continuation sheet.

10.02 Specify the exact location of your facility (from central point where process unit is located) in terms of latitude and longitude or Universal Transverse Mercader (UTM) coordinates.

Latitude ..... 039 ° 32 ' 46 "

Longitude ..... 082 ° 56 ' 29 "

UTM coordinates ..... Zone _____, Northing _____, Easting _____

10.03 If you monitor meteorological conditions in the vicinity of your facility, provide the following information.

Average annual precipitation ..... _____ inches/year

Predominant wind direction ..... _____

10.04 Indicate the depth to groundwater below your facility.

Depth to groundwater ..... _____ meters

10.05 For each on-site activity listed, indicate (Y/N/NA) all routine releases of the listed substance to the environment. (Refer to the instructions for a definition of Y, N, and NA.)

CBI

[ ]

On-Site Activity	Environmental Release		
	Air	Water	Land
Manufacturing	NA	NA	NA
Importing	NA	NA	NA
Processing	Y	N	N
Otherwise used	NA	NA	NA
Product or residual storage	Y	N	N
Disposal	Y	N	N
Transport	NA	NA	NA

[ ] Mark (X) this box if you attach a continuation sheet.

10.06 Provide the following information for the listed substance and specify the level of precision for each item. (Refer to the instructions for further explanation and an example.)

CBI

[ ]

Quantity discharged to the air	0.9	kg/yr ± 100	%
Quantity discharged in wastewaters	0	kg/yr ± ___	%
Quantity managed as other waste in on-site treatment, storage, or disposal units	8100	kg/yr ± 20	%
Quantity managed as other waste in off-site treatment, storage, or disposal units	0	kg/yr ± ___	%

[ ] Mark (X) this box if you attach a continuation sheet.

10.08 Describe the control technologies used to minimize release of the listed substance for each process stream containing the listed substance as identified in your process block or residual treatment block flow diagram(s). Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... PRODUCTION OF I

Stream ID Code	Control Technology	Percent Efficiency
7H	NEUTRALIZATION	>90%
7L	SCRUBBER	>90%
7I	SCRUBBER	>90%

[X] Mark (X) this box if you attach a continuation sheet.

PART B RELEASE TO AIR

10.09 Point Source Emissions -- Identify each emission point source containing the listed substance in terms of a Stream ID Code as identified in your process block or residual treatment block flow diagram(s), and provide a description of each point source. Do not include raw material and product storage vents, or fugitive emission sources (e.g., equipment leaks). Photocopy this question and complete it separately for each process type.

CBI
[ ]

Process type ..... PRODUCTION OF I

Point Source ID Code	Description of Emission Point Source
7R	BUILDING 2 VENT

[X] Mark (X) this box if you attach a continuation sheet.

[ ] Mark (X) this box if you attach a continuation sheet.

10.10 Emission Characteristics - - Characterize the emissions for each Point Source ID Code identified in question 10.09 by completing the following table.

CBI

[ ]

Point Source ID Code	Physical State[1]	Average Emissions (kg/day)	Frequency[2] (days/yr)	Duration[3] (min/day)	Average Emission Factor[4]	Maximum Emission Rate (kg/min)	Maximum Emission Rate Frequency (events/yr)	Maximum Emission Rate Duration (min/event)
7R	G	185	90	660	NA	165	90	525
7YY	G	221	40	840	NA	165	40	420
7EEEE	G	203	39	720	NA	165	39	525

[1]Use the following codes to designate physical state at the point of release:
G = Gas; V = Vapor; P = Particulate; A = Aerosol; O = Other (specify) _____

[2]Frequency of emission at any level of emission

[3]Duration of emission at any level of emission

[4]Average Emission Factor — Provide estimated (± 25 percent) emission factor (kg of emission per kg of production of listed substance)

10.11 Stack Parameters -- Identify the stack parameters for each Point Source ID Code identified in question 10.09 by completing the following table.

CBI

[ ]

Point Source ID Code	Stack Height(m)	Stack Inner Diameter (at outlet) (m)	Exhaust Temperature (°C)	Emission Exit Velocity (m/sec)	Building Height(m)[1]	Building Width(m)[2]	Vent Type[3]
7R	15	0.10	Ambient	0.6	15	15	Y
7YY	15	0.10	Ambient	0.6	15	15	Y
7EEEE	15	0.10	Ambient	0.6	15	15	Y

[1]Height of attached or adjacent building

[2]Width of attached or adjacent building

[3]Use the following codes to designate vent type:

H = Horizontal
V = Vertical

[ ] Mark (X) this box if you attach a continuation sheet.

10.12 If the listed substance is emitted in particulate form, indicate the particle size distribution for each Point Source ID Code identified in question 10.09. Photocopy this question and complete it separately for each emission point source.

CBI

[ ] Point source ID code ..... NA

Size Range (microns)	Mass Fraction (% ± % precision)
< 1	
≥ 1 to < 10	
≥ 10 to < 30	
≥ 30 to < 50	
≥ 50 to < 100	
≥ 100 to < 500	
≥ 500	
	Total = 100%

[ ] Mark (X) this box if you attach a continuation sheet.

PART C FUGITIVE EMISSIONS

10.13 Equipment Leaks -- Complete the following table by providing the number of equipment types listed which are exposed to the listed substance and which are in service according to the specified weight percent of the listed substance passing through the component. Do this for each process type identified in your process block or residual treatment block flow diagram(s). Do not include equipment types that are not exposed to the listed substance. If this is a batch or intermittently operated process, give an overall percentage of time per year that the process type is exposed to the listed substance. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... PRODUCTION OF I

Percentage of time per year that the listed substance is exposed to this process type ..... 100 %

Equipment Type	Number of Components in Service by Weight Percent of Listed Substance in Process Stream					
	Less than 5%	5-10%	11-25%	26-75%	76-99%	Greater than 99%
Pump seals[1]						
Packed						
Mechanical						
Double mechanical[2]						
Compressor seals[1]						
Flanges						6
Valves						
Gas[3]						
Liquid						12
Pressure relief devices[4] (Gas or vapor only)						1
Sample connections						
Gas						
Liquid						
Open-ended lines[5] (e.g., purge, vent)						
Gas						
Liquid						1

[1]List the number of pump and compressor seals, rather than the number of pumps or compressors

10.13 continued on next page

[X] Mark (X) this box if you attach a continuation sheet.

10.13 (continued)

[2]If double mechanical seals are operated with the barrier (B) fluid at a pressure greater than the pump stuffing box pressure and/or equipped with a sensor (S) that will detect failure of the seal system, the barrier fluid system, or both, indicate with a "B" and/or an "S", respectively

[3]Conditions existing in the valve during normal operation

[4]Report all pressure relief devices in service, including those equipped with control devices

[5]Lines closed during normal operation that would be used during maintenance operations

10.14 Pressure Relief Devices with Controls -- Complete the following table for those pressure relief devices identified in 10.13 to indicate which pressure relief devices in service are controlled. If a pressure relief device is not controlled, enter "None" under column c.

CBI

[ ]

a. Number of Pressure Relief Devices	b. Percent Chemical in Vessel[1]	c. Control Device	d. Estimated Control Efficiency[2]
1	100%	CONSERVATION VENT	>90%

[1]Refer to the table in question 10.13 and record the percent range given under the heading entitled "Number of Components in Service by Weight Percent of Listed Substance" (e.g., <5%, 5-10%, 11-25%, etc.)

[2]The EPA assigns a control efficiency of 100 percent for equipment leaks controlled with rupture discs under normal operating conditions. The EPA assigns a control efficiency of 98 percent for emissions routed to a flare under normal operating conditions

[ ] Mark (X) this box if you attach a continuation sheet.

10.15 Equipment Leak Detection -- If a formal leak detection and repair program is in place, complete the following table regarding those leak detection and repair procedures. Photocopy this question and complete it separately for each process type.

CBI

NO FORMAL LEAK DETECTION PROGRAM

[ ] Process type ..... _____

Equipment Type	Leak Detection Concentration (ppm or mg/m^3) Measured at ____ Inches from Source	Detection Device[1]	Frequency of Leak Detection (per year)	Repairs Initiated (days after detection)	Repairs Completed (days after initiated)
Pump seals					
Packed					
Mechanical					
Double mechanical					
Compressor seals					
Flanges					
Valves					
Gas					
Liquid					
Pressure relief devices (gas or vapor only)					
Sample connections					
Gas					
Liquid					
Open-ended lines					
Gas					
Liquid					

[1]Use the following codes to designate detection device:

POVA = Portable organic vapor analyzer
FPM = Fixed point monitoring
O = Other (specify) _____

[ ] Mark (X) this box if you attach a continuation sheet.

10.16 Raw Material, Intermediate and Product Storage Emissions - - Complete the following table by providing the information on each liquid raw material, intermediate, and product storage vessel containing the listed substance as identified in your process block or residual treatment block flow diagram(s).

CBI

☐

Vessel Type[1]	Floating Roof Seals[2]	Composition of Stored Materials[3]	Throughput (liters per year)	Vessel Filling Rate (gpm)	Vessel Filling Duration (min)	Vessel Inner Diameter (m)	Vessel Height (m)	Operating Vessel Volume (l)	Vessel Emission Controls[4]	Design Flow Rate[5]	Vent Diameter (cm)	Control Efficiency (%)	Basis for Estimate[6]
F		100	905,215	100	50	2.4	6.6	22,000	Scrubber Conservation Vent	400CFM	10	790	C

[1]Use the following codes to designate vessel type:

F = Fixed roof
CIF = Contact internal floating roof
NCIF = Noncontact internal floating roof
EFR = External floating roof
P = Pressure vessel (indicate pressure rating)
H = Horizontal
U = Underground

[2]Use the following codes to designate floating roof seals:

MS1 = Mechanical shoe, primary
MS2 = Shoe-mounted secondary
MS2R = Rim-mounted, secondary
LM1 = Liquid-mounted resilient filled seal, primary
LM2 = Rim-mounted shield
LMW = Weather shield
VM1 = Vapor mounted resilient filled seal, primary
VM2 = Rim-mounted secondary
VMW = Weather shield

[3]Indicate weight percent of the listed substance. Include the total volatile organic content in parenthesis

[4]Other than floating roofs

[5]Gas/vapor flow rate the emission control device was designed to handle (specify flow rate units)

[6]Use the following codes to designate basis for estimate of control efficiency:

C = Calculations
S = Sampling

☐ Mark (X) this box if you attach a continuation sheet.

PART E NON-ROUTINE RELEASES

10.23 Indicate the date and time when the release occurred and when the release ceased or was stopped. If there were more than six releases, attach a continuation sheet and list all releases.

NA

Release	Date Started	Time (am/pm)	Date Stopped	Time (am/pm)
1				
2				
3				
4				
5				
6				

10.24 Specify the weather conditions at the time of each release.

Release	Wind Speed (km/hr)	Wind Direction	Humidity (%)	Temperature (°C)	Precipitation (Y/N)
1					
2					
3					
4					
5					
6					

[ ] Mark (X) this box if you attach a continuation sheet.

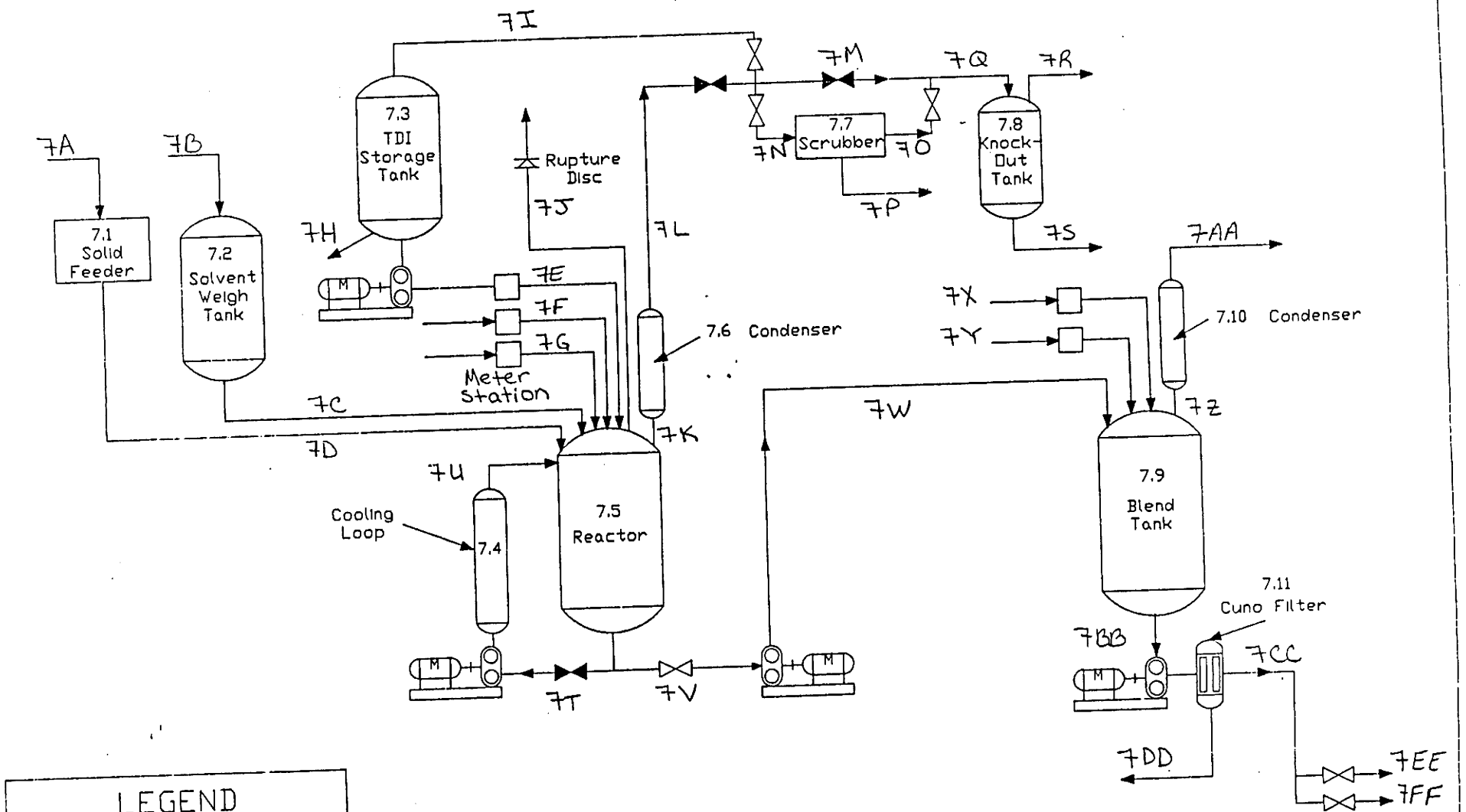
APPENDIX I: List of Continuation Sheets

Attach continuation sheets for sections of this form and optional information after this page. In column 1, clearly identify the continuation sheet by listing the question number to which it relates. In column 2, enter the inclusive page numbers of the continuation sheet for each question number.

Question Number (1)	Continuation Sheet Page Numbers (2)
7.01	42B-
7.02	43B-43D
7.03	44B-44D
7.05	46B-46W
7.06	47B-47X
8.01	50B
8.05	54B-54E
8.06	58B-58C
9.04	91B
9.06	93B-93E
9.12	98B-98E
9.14	100B-100E
10.08	112B-112C
10.09	113B-113C
10.13	117B-117C

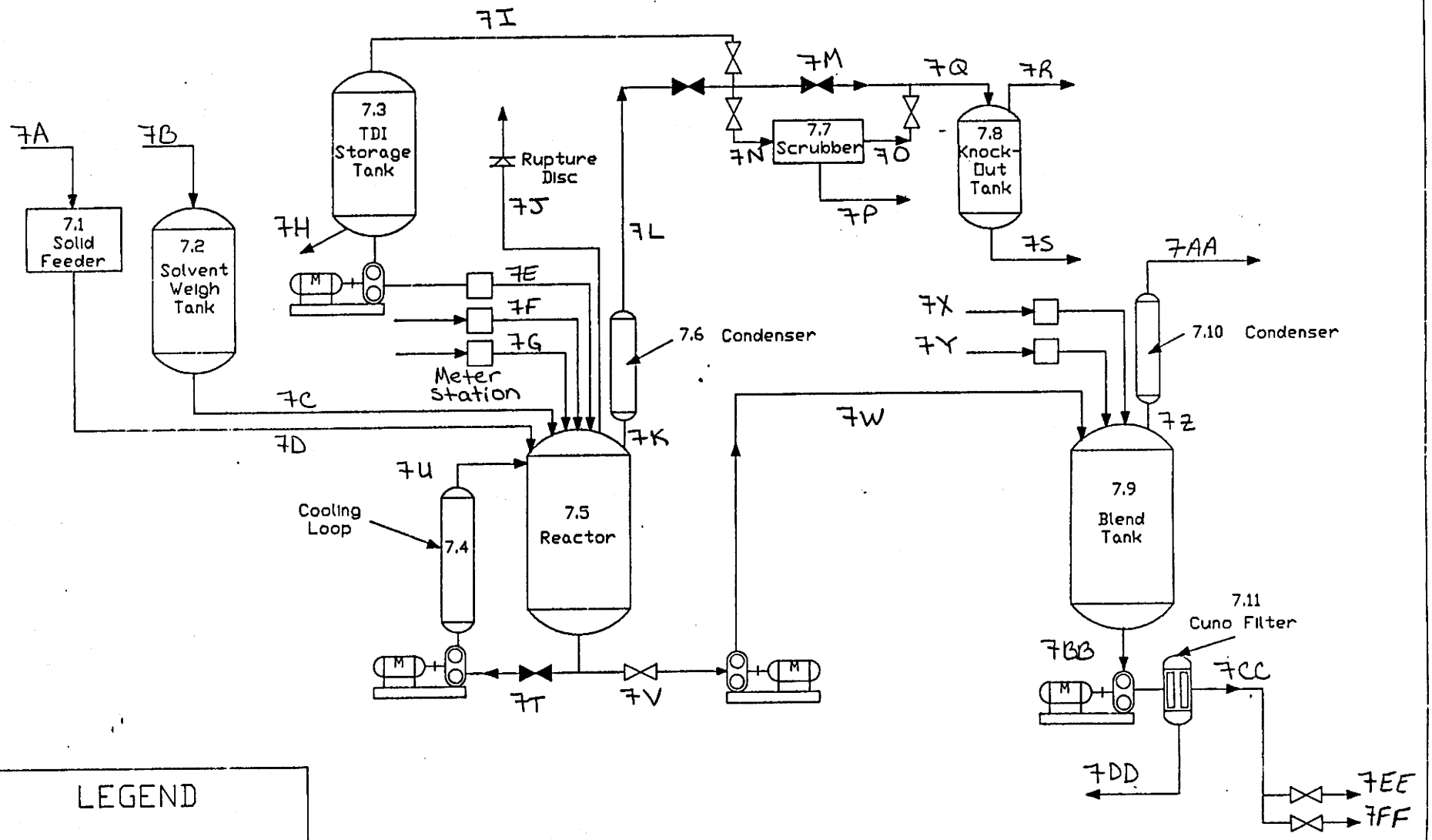
[ ] Mark (X) this box if you attach a continuation sheet.

Process Type Urethane Crosslinker Polymer Production



7.02

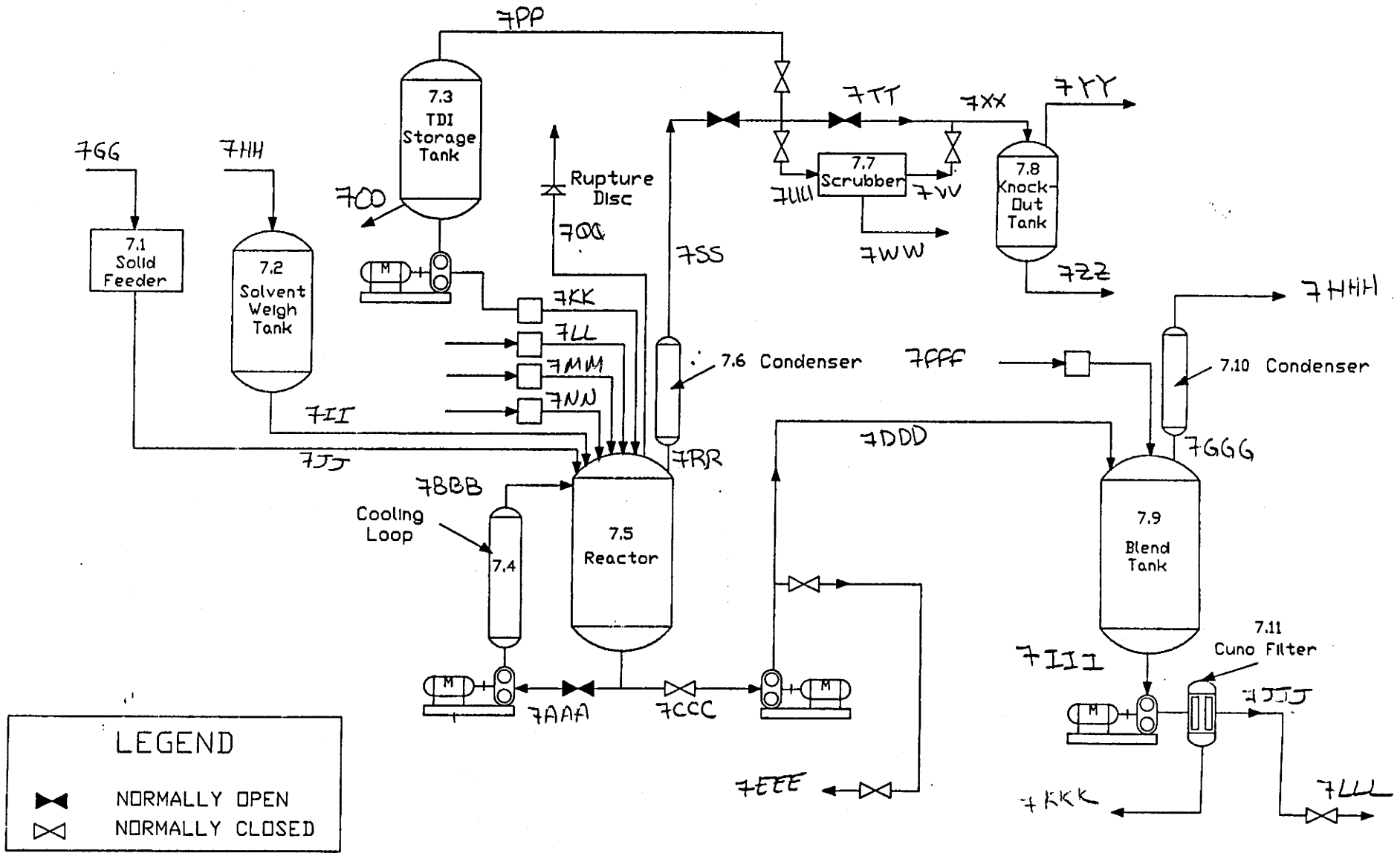
Process Type I



43B

7.02

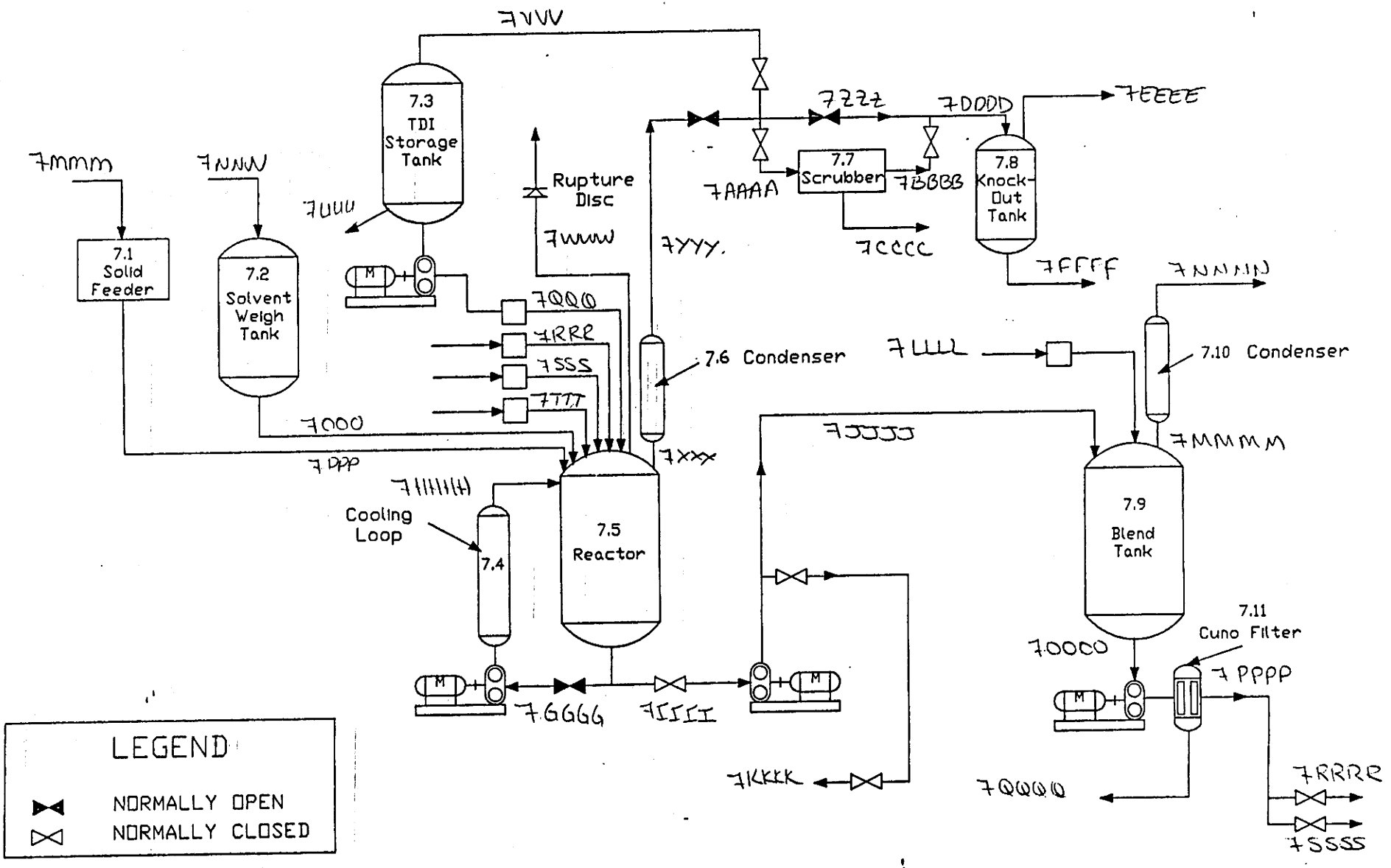
Process Type..... II



43C

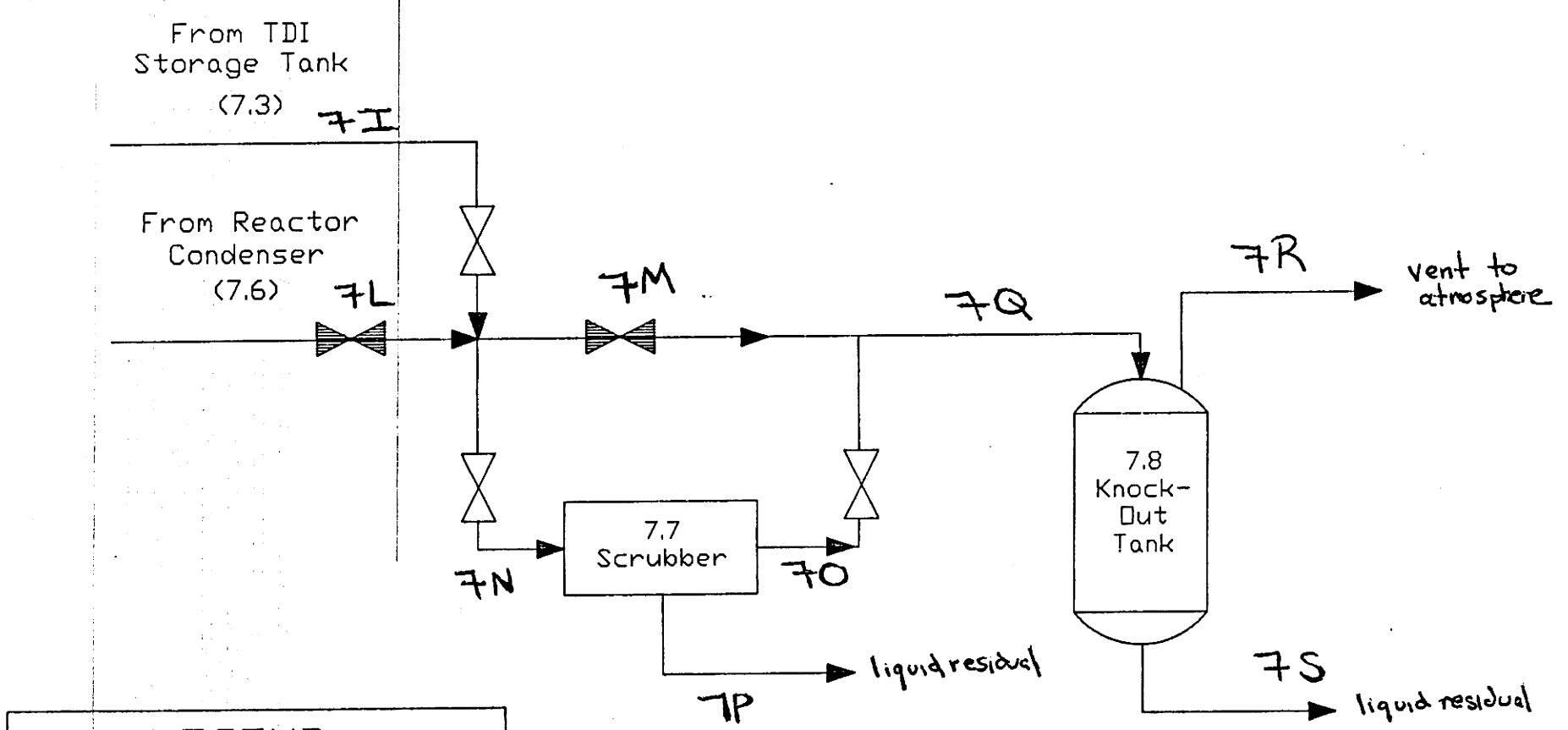
7.02

Process Type III



43D

Process Type I

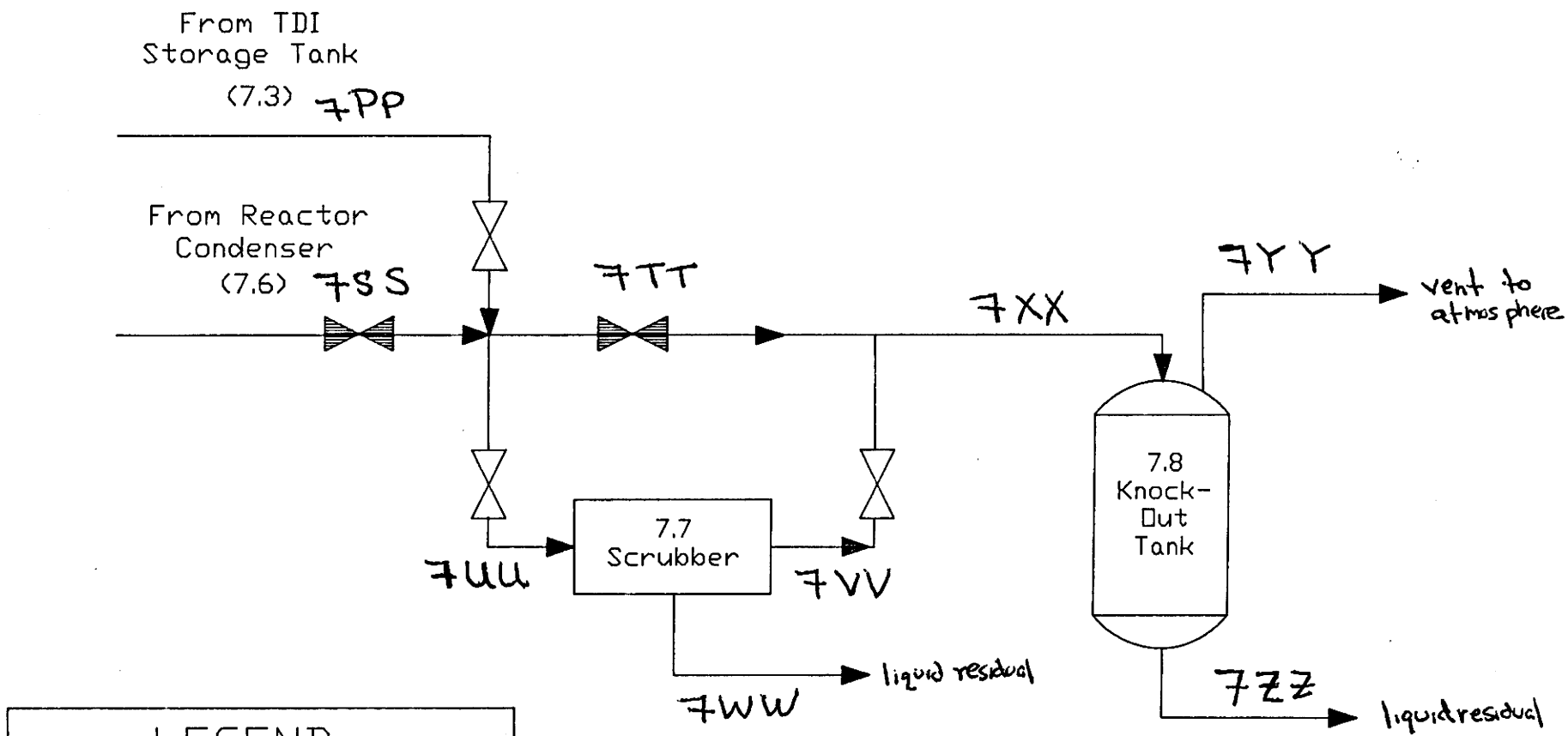


LEGEND

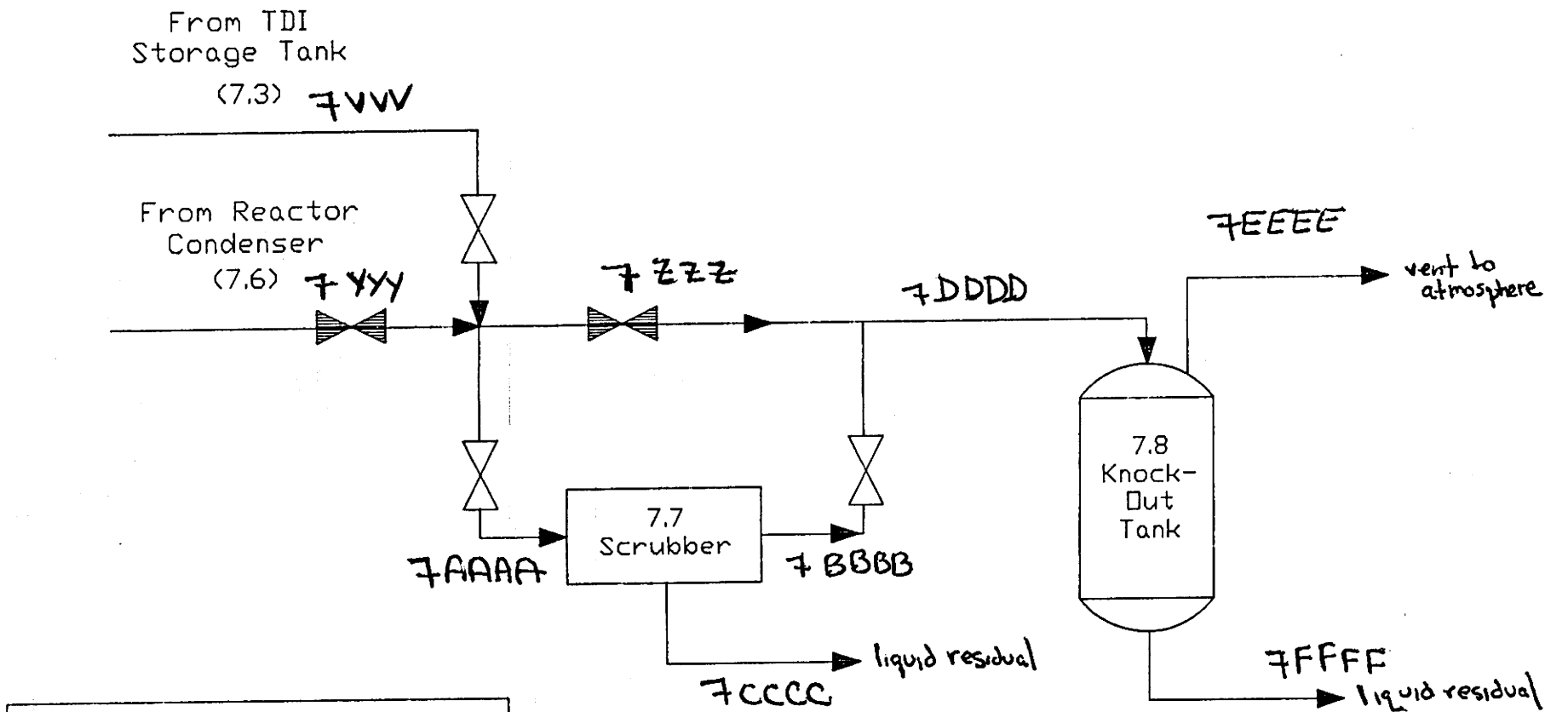
NORMALLY OPEN

NORMALLY CLOSED

Process Type II



Process Type III



LEGEND

NORMALLY OPEN

NORMALLY CLOSED

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type I

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7I	Storage Tank Vent	GU	473
* 7J	Rupture Disc Vent Line	GU	0
** 7J	" "	GC	0
* 7K	Condenser Inlet From Reactor	GU	473
** 7K	" "	GC	21,027
* 7L	Condenser Outlet	GU	473
** 7L	" "	GU	15,757
* 7M	Scrubber By-Pass.	—	—

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[ ] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type I

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
** 7M	Scrubber By-Pass	GU	15,757
* 7N	Scrubber Inlet	GU	946
** 7N	" "	—	—
* 7O	Scrubber Outlet	GU	946
** 7O	" "	—	—
* 7P	Scrubber Blowdown	AL	23,000
** 7P	" "	—	—
* 7Q	Knock-Out Tank Inlet	GU	946

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

☒ Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type I

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
** 7Q	Knock-Out Tank Inlet	GU	15,757
* 7R	Knock-Out Tank Vent	GU	946
** 7R	" "	GU	15,704
* 7S	Knock-Out Tank Outlet	OL	~0
** 7S	" "	OL	.53
7T	Cooling Loop Inlet	OL	1,277,917
7U	Cooling Loop Outlet	OL	1,277,917
7V	Reactor Outlet	OL	1,277,917

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type I

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7W	Blend Tank Inlet	OL	1,222,917
7X	Raw Material	OL	198,026
7Y	Raw Material	OL	46,362
7Z	Condenser Inlet From Blend TK.	GC	3433
7AA	Condenser Outlet	GU	977
7BB	Blend Tank Outlet	OL	1,522,263
7CC	Polymer Product	OL	1,521934
7DD	Spent Filters.	SO	329

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type I

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7EE	Product to Tank Wagon	OL	1471203
7FF	Product to Drums	OL	50,731

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type II

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7GG	Raw Material	SO	64,569
7HH	Raw Material	OL	171,475
7II	Raw Material	OL	171,475
7JJ	Raw Material	SO	64,569
7KK	Raw Material	OL	248,813
7LL	Raw Material	OL	109,679
7MM	Raw Material	OL	67
7NN	Raw Material	OL	25,545

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type II

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
700	Raw Material	OL	34
7PP	Storage Tank Vent	GU	232
* 700	Rupture Disc Vent Line	GU	0
** 700	" "	GC	0
*** 700	" "	GC	0
* 7RR	Condenser Inlet from Reactor	GU	232
** 7RR	" "	GC	8936
*** 7RR	" "	GC	1,962

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type II

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
* 755	Condenser Outlet	GU	232
** 755	" "	GU	6,524
*** 755	" "	GU	1866
* 7TT	Scrubber By-Pass	—	—
** 7TT	" "	GU	6,524
*** 7TT	" "	GU	1,866
* 7UU	Scrubber Inlet	GU	464
** 7UU	" "	—	—

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type II

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
*** 7UU	Scrubber Inlet	—	—
* 7VV	Scrubber Outlet	GU	464
** 7VV	—	—	—
*** 7VV	—	—	—
* 7WW	Scrubber blowdown	AL	10,300
** 7WW	—	—	—
*** 7WW	—	—	—
* 7XX	Knock-Out Tank Inlet	GU	464

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type II

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
** 7XX	Knock-out Tank Inlet	GU	6,524
*** 7XX	" "	GU	1866
* 7YY	Knock-out Tank Vent	GU	464
** 7YY	" "	GU	6,518
*** 7YY	" "	GU	1,863
* 7ZZ	Knock-out Tank Outlet	—	0
** 7ZZ	" "	OL	6
*** 7ZZ	" "	OL	3

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type II

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
* 7AAA	Cooling Loop Inlet	—	—
** 7AAA	" "	OL	594,603
*** 7AAA	" "	OL	25,485
* 7BBB	Cooling Loop Outlet	—	—
** 7BBB	" "	OL	594,603
*** 7BBB	" "	OL	25,485
* 7CCC	Reactor Outlet	—	—
** 7CCC	" "	OL	594,603

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type II

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
*** 7CCC	Reactor Outlet	OL	25,485
7DDD	Blend Tank Inlet	OL	594,603
7EEE	Flush to Dirty Solvent Tank	OL	25,485
7FFF	Raw Material	OL	82,259
7GGG	Condenser Inlet from Blend Tank	GC	936
7HHH	Condenser Outlet	GU	494
7III	Blend Tank Outlet	OL	676,862
7JJJ	Polymer Product	OL	676,715

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... II -

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7KKK	Spent Filters	SO	147
7LLL	Product to Tank Wagon		676,715

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type III

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7MMM	Raw Material	SO	64,410
7NNN	Raw Material	OL	186,100
7000	Raw Material	OL	186,100
7PPP	Raw Material	SO	64,410
7QQQ	Raw Material	OL	248,366
7RRR	Raw Material	OL	112,491
7SSS	Raw Material	OL	73
7TTT	Raw Material	OL	26,200

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[X] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type III

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
7UUU	Raw Material	OL	34
7VVV	Storage Tank Vent	GU	233
* 7WWW	Rupture Disc Vent Line	GU	0
** 7WWW	" "	GC	0
*** 7WWW	" "	GC	0
* 7XXX	Condenser Inlet From Reactor	GU	33
** 7XXX	" "	GC	8081
*** 7XXX	" "	GC	1,962

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[ ] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type III

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
* 7YYY	Condenser Outlet	GU	233
** 7YYY	" "	GU	5587
*** 7YYY	" "	GU	1866
* 7ZZZ	Scrubber By-Pass	—	—
** 7ZZZ	" "	GU	5587
*** 7ZZZ	" "	GU	1866
* 7AAAA	Scrubber Inlet	GU	466
** 7AAAA	" "	—	—

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[ ] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type III

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
*** 7AAAA	Scrubber Inlet	—	—
* 7BBBB	Scrubber Outlet	GU	466
** 7BBBB	" "	—	—
*** 7BBBB	" "	—	—
* 7CCCC	Scrubber blowdown	AL	40,000 kg/yr
** 7CCCC	" "	—	—
*** 7CCCC	—	—	—
* 7DDDD	Knock-Out Tank Inlet	GU	466

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[ ] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... JIT

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
** 1DDDD	Knock-Out Tank Inlet	GU	5587
*** 1DDDD	" "	GU	1866
* 1EEEE	Knock-Out Tank Vent	GU	466
** 1EEEE	" "	GU	5582
*** 1EEEE	" "	GU	1863
* 1FFFF	Knock-Out Tank Outlet	—	0
** 1FFFF	" "	OL	5
*** 1FFFF	" "	OL	3

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[ ] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type III

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
* 76666	Cooling Loop Inlet	—	—
** 76666	" "	OL	611,439
*** 76666	" "	OL	25,485
* 71111	Cooling Loop Outlet	—	—
** 71111	" "	OL	611,439
*** 71111	" "	OL	25,485
* 71111	Reactor Outlet	—	—
** 71111	" "	OL	611,439

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[ ] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type III

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
XXX 7TTTT	Reactor Outlet	OL	25,485
7JJJJ	Blend Tank Inlet	OL	611,439
7KKKK	Flush to Dirty Solvent Tank	OL	25,485
7LLLL	Raw Material	OL	102,648
7MMMM	Condenser Inlet from Blend Tank	GC	1,379
7NNNN	Condenser Outlet	GU	728
7OOOO	Blend Tank Outlet	OL	723,086
7PPPP	Polymer Product	OL	722,935

[1] Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[ ] Mark (X) this box if you attach a continuation sheet.

7.05 Describe each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.

CBI

[ ] Process type III

Process Stream ID Code	Process Stream Description	Physical State[1]	Stream Flow (kg/yr)
70000	Spent Filters	SO	151
7RRRR	Product to Tank Wagon	OL	36,147
75555	Product to Drums	OL	686,788

[1]Use the following codes to designate the physical state for each process stream:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[ ] Mark (X) this box if you attach a continuation sheet.

Note: You will notice astericks on several of the following stream ID codes in both section 7 and 8. The astericks reference the stage of the batch process when the stream is "active". No astericks indicate that the steam is a continuous one. The astericks represent the following stages.

* TDI Charge Only Stage.

** Reactive components w/ Thinning Solvent.

*** Xylene Flush

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type I

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
** 7J	MIBK	30.09% (E)(W)	NA	NA
	Nitrogen	69.91% (E)(W)	NA	NA
* 7K	TDI	.0016% (E)(W)	NA	NA
	Nitrogen	91.984% (E)(W)	NA	NA
** 7K	MIBK	3.091% (E)(W)	NA	NA
	Nitrogen	69.919% (E)(W)	NA	NA
* 7L	TDI	.005% (E)(W)	NA	NA
	Nitrogen	99.995% (E)(W)	NA	NA
** 7L	MIBK	6.71% (E)(W)	NA	NA
	Nitrogen	93.29% (E)(W)	NA	NA
* 7M	—	—	—	—
	—	—	—	—

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type I

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
** 7M	MIBK	6.71% (E)(W)	NA	NA
	Nitrogen	93.29% (E)(W)	NA	NA
* 7N	TDI	0.010% (E)(W)	NA	NA
	Nitrogen	99.990% (E)(W)	NA	NA
** 7N	—	—	—	—
	—	—	—	—
* 7O	Nitrogen	>99.99% (E)(W)	TDI	<.005 ppm
	NA	NA	NA	NA
** 7O	—	—	—	—
	—	—	—	—
* 7P	Urea	4 ppm (E)(W)		—
	Water	>99.99% (E)(W)		

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type I

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
** 7P	—	—	—	—
	—	—	—	—
* 7Q	Nitrogen	99.99% (E)(W)	TDI	<0.005 ppm
	NA	NA	NA	NA
** 7Q	MIBK	6.71% (E)(W)	NA	NA
	Nitrogen	93.29% (E)(W)	NA	NA
* 7R	Nitrogen	100% (E)(W)	TDI	<.005 ppm
	NA	NA	NA	NA
** 7R	MIBK	6.40% (E)(W)	NA	NA
	Nitrogen	93.60% (E)(W)	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type I

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
*7S	NONE	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
**7S	MIBK	100% (EXW)	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NH
	NA	NA	NA	NA
7T	MIBK	17.04% (EXW)	NA	NA
	Polymer	82.96% (EXW)	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type I

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7U	MIBK	17.04% (E)(W)	NA	NA
	Polymer	82.96% (E)(W)	NA	NA
7V	MIBK	17.04% (E)(W)	NA	NA
	Polymer	82.96% (E)(W)	NA	NA
7W	MIBK	17.04% (E)(W)	NA	NA
	Polymer	82.96% (E)(W)	NA	NA
7X	MIBK	100% (A)(W)	NA	NA
7Y	n-BuOH	100% (A)(W)	NA	NA
7Z	MIBK	68.22% (E)(W)	NA	NA
	n-BuOH	12.71% (E)(W)	NA	NA
	Nitrogen	19.07% (E)(W)	NA	NA
	NA	NA	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type I

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7AA	MIBK	5.85% (E)(W)	NA	NA
	n-BuOH	.20% (E)(W)	NA	NA
	Nitrogen	93.95% (E)(W)	NA	NA
	NA	NA	NA	NA
7BB	MIBK	27.31% (E)(W)	NA	NA
	n-BuOH	3.05% (E)(W)	NA	NA
	Polymer	69.64% (E)(W)	NA	NA
	NA	NA	NA	NA
7CC	MIBK	27.31% (E)(W)	NA	NA
	n-BuOH	3.05% (E)(W)	NA	NA
	Polymer	69.64% (E)(W)	NA	NA
	NA	NA	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type ..... T

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7DD	Spent Filters	24.83%(EYW)	NA	NA
	MIBK	20.53%(EYW)	NA	NA
	n-BuOH	2.29%(EYW)	NA	NA
	Polymer	52.35%(EYW)	NA	NA
7EE	MIBK	27.31%(EYW)	NA	NA
	n-BuOH	3.05%(EYW)	NA	NA
	Polymer	69.64%(EYW)	NA	NA
	NA	NA	NA	NA
7FF	MIBK	27.31%(EYW)	NA	NA
	n-BuOH	3.05%(EYW)	NA	NA
	Polymer	69.64%(EYW)	NA	NA
	NA	NA	NA	NA

7.06, continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type II

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7GG	TMP	798.5%(A)(W)	-NA	NA
7HH	2-butoxyethanol	100%(A)(W)	-NA	NA
7II	2-butoxyethanol	100%(A)(W)	NA	NA
7JJ	TMP	>98.5%(A)(W)	NA	NA
7KK	TDI	100%(A)(W)	NA	NA
7LL	2-ethoxyethanol	100%(A)(W)	NA	NA
7MM	Dibutyltin Dilaurate	>95%(A)(W)	NA	NA
7NN	Xylene	100%(A)(W)	NA	NA
700	TDI	100%(A)(W)	NA	NA
7PP	TDI	0.016%(E)(W)	NA	NA
	Nitrogen	99.984%(E)(W)	NA	NA
	NA	NA	NA	NA

7.06 continued below

☒ Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type II

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
* 700	TDI	0.016%(E)(W)	NA	NA
	Nitrogen	99.984%(E)(W)	NA	NA
** 700	2-ethoxyethanol	28.33%(E)(W)	NA	NA
	Nitrogen	71.67%(E)(W)	NA	NA
*** 700	Xylene	7.93%(E)(W)	NA	NA
	Nitrogen	92.07%(E)(W)	NA	NA
* 7RR	TDI	0.016%(E)(W)	NA	NA
	Nitrogen	99.984%(E)(W)	NA	NA
** 7RR	2-ethoxyethanol	28.33%(E)(W)	NA	NA
	Nitrogen	71.67%(E)(W)	NA	NA
*** 7RR	Xylene	7.93%(E)(W)	NA	NA
	Nitrogen	92.07%(E)(W)	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type II

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
* 755	TDI	0.005% (E)(W)	NA	ND
	Nitrogen	99.995% (E)(W)	NA	NA
** 755	2-ethoxyethanol	1.83% (E)(W)	NA	NA
	Nitrogen	98.17% (E)(W)	NA	NA
*** 755	Xylene	3.21% (E)(W)	NA	NA
	Nitrogen	96.79% (E)(W)	NA	NA
* 7TT	—	—	—	—
** 7TT	2-ethoxyethanol	1.83% (E)(W)	NA	NA
	Nitrogen	98.17% (E)(W)	NA	NA
*** 7TT	Xylene	3.21% (E)(W)	NA	NA
	Nitrogen	96.79% (E)(W)	NA	NA
	NA	NA	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type II

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
* JUU	TDI	001% (E)(W)	NA	NA
	Nitrogen	99.99% (E)(W)	NA	NA
** JUU	—	—	—	—
*** JUU	—	—	—	—
* JVV	Nitrogen	>99.99% (E)(W)	TDI	<.005 ppm
	NA	NA	NA	NA
** JVV	—	—	—	—
*** JVV	—	—	—	—
* JWW	Urea	5 ppm (E)(W)		
	Water	>99.99% (E)(W)		
** JWW	—	—	—	—
*** JWW	—	—	—	—

7.06 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type II

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
* 7XX	Nitrogen	>99.99% (E)(W)	TDI	<.005 ppm
	NA	NA	NA	NA
** 7XX	2-ethoxyethanol	1.83% (E)(W)	NA	NA
	Nitrogen	98.17% (E)(W)	NA	NA
*** 7XX	xylene	3.21% (E)(W)	NA	NA
	Nitrogen	96.79% (E)(W)	NA	NA
* 7YY	Nitrogen	100% (E)(W)	TDI	<.005 ppm
** 7YY	2-ethoxyethanol	1.74% (E)(W)	NA	NA
	Nitrogen	98.26% (E)(W)	NA	NA
*** 7YY	Xylene	3.05% (E)(W)	NA	NA
	Nitrogen	96.95% (E)(W)	NA	NA
	NA	NA	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type II

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
* 722	NONE	NA	NA	NA
** 722	2-ethoxyethanol	100%(EXW)	NA	NA
*** 722	Xylene	100%(EXW)	NA	NA
* 7AAA	—	—	—	—
** 7AAA	Polymer	81.55%(EXW)	NA	NA
	2-ethoxyethanol	18.45%(EXW)	NA	NA
*** 7AAA	Xylene	100%(EXW)	NA	NA
* 7BBB	—	—	—	—
** 7BBB	Polymer	81.55%(EXW)	NA	NA
	2-ethoxyethanol	18.45%(EXW)	NA	NA
*** 7BBB	Xylene	100%(EXW)	NA	NA
	NA	NA	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type II

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
* 7CCC	—	—	—	—
** 7CCC	polymer	81.55% (EXW)	NA	NA
	2-ethoxyethanol	18.45% (EXW)	NA	NA
*** 7CCC	xylene	100% (EXW)	NA	NA
7DDD	polymer	81.55% (EXW)	NA	NA
	2-ethoxyethanol	18.45% (EXW)	NA	NA
7EEE	xylene	100% (EXW)	NA	NA
7FFF	2-ethoxyethanol	100% (A)(W)	NA	NA
7666	2-ethoxyethanol	48.20% (EXW)	NA	NA
	Nitrogen	51.80% (EXW)	NA	NA
7HHH	2-ethoxyethanol	1.83% (EXW)	NA	NA
	Nitrogen	98.17% (EXW)	NA	NA

7.06 continued below

☒ Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type II

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7III	Polymer	71.64% (E)(W)	NA	NA
	2-ethoxyethanol	28.36% (E)(W)	NA	NA
7JJJ	Polymer	71.64% (E)(W)	NA	NA
	2-ethoxyethanol	28.36% (E)(W)	NA	NA
7KKK	Scent-Fitters	46.51% (E)(W)	NA	NA
	2-ethoxyethanol	15.27% (E)(W)	NA	NA
	Polymer	38.22% (E)(W)	NA	NA
	NA	NA	NA	NA
7LLL	Polymer	71.64% (E)(W)	NA	NA
	2-ethoxyethanol	28.36% (E)(W)	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type III

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
7MMM	TMP	799.5%(A)(W)	NA	NA
7NNN	2-ethylhexyl alcohol	100%(A)(W)	NA	NA
7000	2-ethylhexyl alcohol	100%(A)(W)	NA	NA
7PPP	TMP	799.5%(A)(W)	NA	NA
7QQQ	TDI	100%(A)(W)	NA	NA
7RRR	2-ethoxyethanol	100%(A)(W)	NA	NA
7SSS	dibutyltin dilaurate	795%(A)(W)	NA	NA
7TTT	Xylene	100%(A)(W)	NA	NA
7UUU	TDI	100%(A)(W)	NA	NA
7VVV	TDI	0.016%(E)(W)	NA	NA
	Nitrogen	99.984%(E)(W)	NA	NA
	NA	NA	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type III

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
* 7WWW	TDI	0.016% (E)(W)	NA	NA
	Nitrogen	99.984% (E)(W)	NA	NA
** 7WWW	2-ethoxyethanol	32.13% (E)(W)	NA	NA
	Nitrogen	67.87% (E)(W)	NA	NA
*** 7WWW	Xylene	7.93% (E)(W)	NA	NA
	Nitrogen	92.07% (E)(W)	NA	NA
* 7XXX	TDI	0.016% (E)(W)	NA	NA
	Nitrogen	99.984% (E)(W)	NA	NA
** 7XXX	2-ethoxy ethanol	32.13% (E)(W)	NA	NA
	Nitrogen	67.87% (E)(W)	NA	NA
*** 7XXX	Xylene	7.93% (E)(W)	NA	NA
	Nitrogen	92.07% (E)(W)	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type III

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
* 7YYY	TDI	0.005%(E)(W)	NA	NA
	Nitrogen	99.995%(E)(W)	NA	NA
** 7YYY	2-ethoxyethanol	1.83%(E)(W)	NA	NA
	Nitrogen	98.17%(E)(W)	NA	NA
*** 7YYY	Xylene	3.21%(E)(W)	NA	NA
	Nitrogen	96.79%(E)(W)	NA	NA
* 7ZZZ	—	—	—	—
	—	—	—	—
** 7ZZZ	2-ethoxyethanol	1.83%(E)(W)	NA	NA
	Nitrogen	98.17%(E)(W)	NA	NA
*** 7ZZZ	Xylene	3.21%(E)(W)	NA	NA
	Nitrogen	96.7%(E)(W)	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type III

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
* 7AAAA	TDI	0.05% (E)(W)	NA	NA
	Nitrogen	99.99% (E)(W)	NA	NA
** 7AAAA	—	—	—	—
*** 7AAAA	—	—	—	—
* 7BBBB	Nitrogen	>99.99% (E)(W)	TDI	< 0.005 ppm
	NA	NA	NA	NA
** 7BBBB	—	—	—	—
*** 7BBBB	—	—	—	—
* 7CCCC	Urea	5 ppm (E)(W)		
	Water	>99.99% (E)(W)		
** 7CCCC	—	—	—	—
*** 7CCCC	—	—	—	—

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type III

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
# 7DDDD	Nitrogen	>99.99% (E)(W)	TDI	<.005 ppm
	NA	NA	NA	NA
## 7DDDD	2-ethoxyethanol	1.83% (E)(W)	NA	NA
	Nitrogen	98.17% (E)(W)	NA	NA
## 7DDDD	Xylene	3.21% (E)(W)	NA	NA
	Nitrogen	96.79% (E)(W)	NA	NA
* 7EEEE	Nitrogen	100% (E)(W)	TDI	<.005 ppm
** 7EEEE	2-ethoxyethanol	1.74% (E)(W)	NA	NA
	Nitrogen	98.26% (E)(W)	NA	NA
### 7EEE	Xylene	3.05% (E)(W)	NA	NA
	Nitrogen	96.95% (E)(W)	NA	NA
	NA	NA	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type III

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
* 7FFFF	NONE	NA	NA	NA
** 7FFFF	2-ethoxyethanol	100%(E)(W)	NA	NA
*** 7FFFF	Xylene	100%(E)(W)	NA	NA
* 76666	—	—	—	—
** 76666	Polymer	81.60%(E)(W)	NA	NA
	2-ethoxyethanol	18.40%(E)(W)	NA	NA
*** 76666	Xylene	100%(E)(W)	NA	NA
* 7HHHH	—	—	—	—
** 7HHHH	Polymer	81.60%(E)(W)	NA	NA
	2-ethoxyethanol	18.40%(E)(W)	NA	NA
	Xylene	100%(E)(W)	NA	NA
	NA	NA	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type III

a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
*7IIII				
**7IIII	Polymer	81.60% (E/W)	NA	NA
	2-ethoxyethanol	18.40% (E/W)	NA	NA
*** 7III	xylene	100% (E/W)	NA	NA
7JJJJ	Polymer	81.60% (E/W)	NA	NA
	2-ethoxyethanol	18.40% (E/W)	NA	NA
7KKKK	xylene	100% (E/W)	NA	NA
7LLLL	2-ethoxyethanol	100% (A/W)	NA	NA
7mmmm	2-ethoxyethanol	48.20% (E/W)	NA	NA
	Nitrogen	51.80% (E/W)	NA	NA
7NNNN	2-ethoxyethanol	1.83% (E/W)	NA	NA
	Nitrogen	98.17% (E/W)	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

7.06 Characterize each process stream identified in your process block flow diagram(s). If a process block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the CBI instructions for further explanation and an example.)

[ ] Process type III

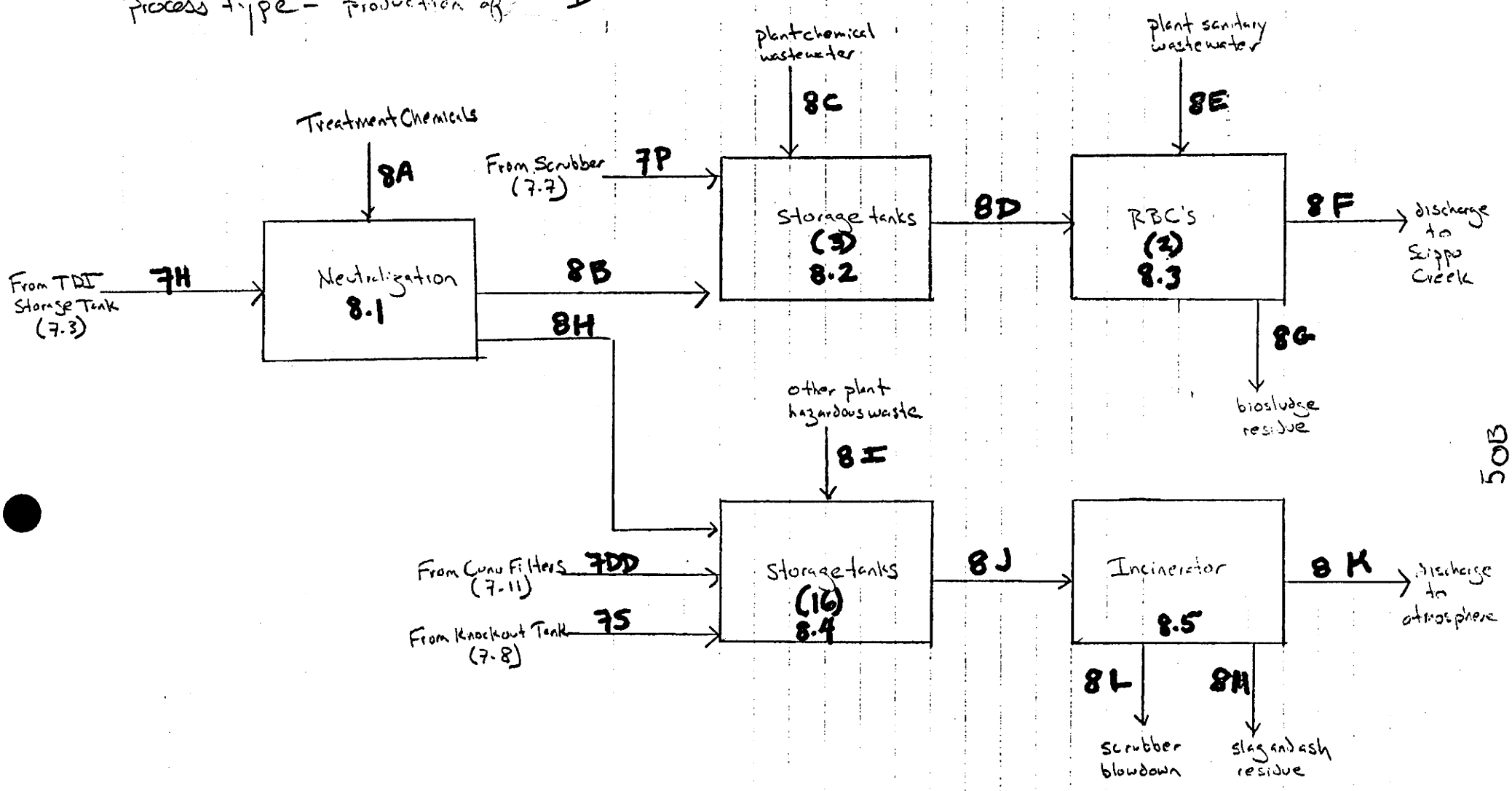
a. Process Stream ID Code	b. Known Compounds[1]	c. Concentrations[2,3] (% or ppm)	d. Other Expected Compounds	e. Estimated Concentrations (% or ppm)
70000	Polymer	69.00% (E)(W)	NA	NA
	2-ethoxyethanol	31.00% (E)(W)	NA	NA
7PPPP	Polymer	69.00% (E)(W)	NA	NA
	2-ethoxyethanol	31.00% (E)(W)	NA	NA
70000	Spent Filter	24.78% (E)(W)	NA	NA
	Polymer	51.95% (E)(W)	NA	NA
	2-ethoxyethanol	23.34% (E)(W)	NA	NA
7RRRR	Polymer	69.00% (E)(W)	NA	NA
	2-ethoxyethanol	31.00% (E)(W)	NA	NA
75555	Polymer	69.00% (E)(W)	NA	NA
	2-ethoxyethanol	31.00% (E)(W)	NA	NA
	NA	NA	NA	NA

7.06 continued below

[X] Mark (X) this box if you attach a continuation sheet.

8.01 Residual Treatment

Process type – production of I



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PART B RESIDUAL GENERATION AND CHARACTERIZATION

8.05 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Production of II

a. Stream ID Code	b. Type of Hazardous Waste[1]	c. Physical State of Residual[2]	d. Known Compounds[3]	e. Concentrations (% or ppm)[4,5,6]	f. Other Expected Compounds	g. Estimated Concentrations (% or ppm)
700	R, T	OL(7.3)	TDI	100% (A)(W)		
7KKK		SO(7.11)	Filtermedia	47% (E)(W)		
			2-Ethoxyethanol	15% (E)(W)		
			Polymer	38% (E)(W)		
7ZZ**	I	OL (7.8)	2-Ethoxyethanol	100% (E)(W)		
7ZZ***	I	OL-(7.8)	Xylene	100% (E)(W)		

8.05 continued below

[X] Mark (X) this box if you attach a continuation sheet.

PART B RESIDUAL GENERATION AND CHARACTERIZATION

8.05 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Production of II

a. Stream ID Code	b. Type of Hazardous Waste[1]	c. Physical State of Residual[2]	d. Known Compounds[3]	e. Concentrations (% or ppm)[4,5,6]	f. Other Expected Compounds	g. Estimated Concentrations (% or ppm)
TWW		AL(7.7)	WATER	>99.99%(E)(W)		
			WATER	5ppm		

8.05 continued below

[X] Mark (X) this box if you attach a continuation sheet.

PART B RESIDUAL GENERATION AND CHARACTERIZATION

8.05 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Production of III

a. Stream ID Code	b. Type of Hazardous Waste[1]	c. Physical State of Residual[2]	d. Known Compounds[3]	e. Concentrations (% or ppm)[4,5,6]	f. Other Expected Compounds	g. Estimated Concentrations (% or ppm)
7UUU		OL(7.3)	TDI	100% (A,W)		
7QQQQ		SO(7.11)	Filtermedia	25% (E)(W)		
			Polymer	52% (E)(W)		
			2-Ethoxyethanol	23% (E)(W)		
7EEEE**	I	OL(7.8)	2-Ethoxyethanol	100% (E)(W)		
7FFFF***	I	OL(7.8)	2-Ethoxyethanol	100% (E)(W)		

8.05 continued below

[X] Mark (X) this box if you attach a continuation sheet.

PART B RESIDUAL GENERATION AND CHARACTERIZATION

8.05 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... PRODUCTION OF TIT

a. Stream ID Code	b. Type of Hazardous Waste[1]	c. Physical State of Residual[2]	d. Known Compounds[3]	e. Concentrations (% or ppm)[4,5,6]	f. Other Expected Compounds	g. Estimated Concentrations (% or ppm)
7CCCC *		AL(7.7)	WATER	>99.99% (E)(W)		
			UREA	5ppm (E)(W)		

8.05 continued below

[ ] Mark (X) this box if you attach a continuation sheet.

8.06 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... Production of : II

a. Stream ID Code	b. Waste Description Code[1]	c. Management Method Code[2]	d. Residual Quantities (kg/yr)	e. Management of Residual (%) On-Site	e. Management of Residual (%) Off-Site	f. Costs for Off-Site Management (per kg)	g. Changes in Management Methods
700	A08	S	34	100			NONE
		ITR					
		IWT(a)					
		54WT(a)					
7KKK	B82	S	329	100			NONE
		1ST					
		3I					
7ZZ	B60	S	9	100			NONE
		1ST					
		2ST					
		3I					
7WW	A05	S	10,300	100			NONE
		IWT(a)					
		54WT(a)					

[1]Use the codes provided in Exhibit 8-1 to designate the waste descriptions

[2]Use the codes provided in Exhibit 8-2 to designate the management methods

[X] Mark (X) this box if you attach a continuation sheet.

8.06 Characterize each process stream identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type. (Refer to the instructions for further explanation and an example.)

CBI

[ ] Process type ..... PRODUCTION OF III

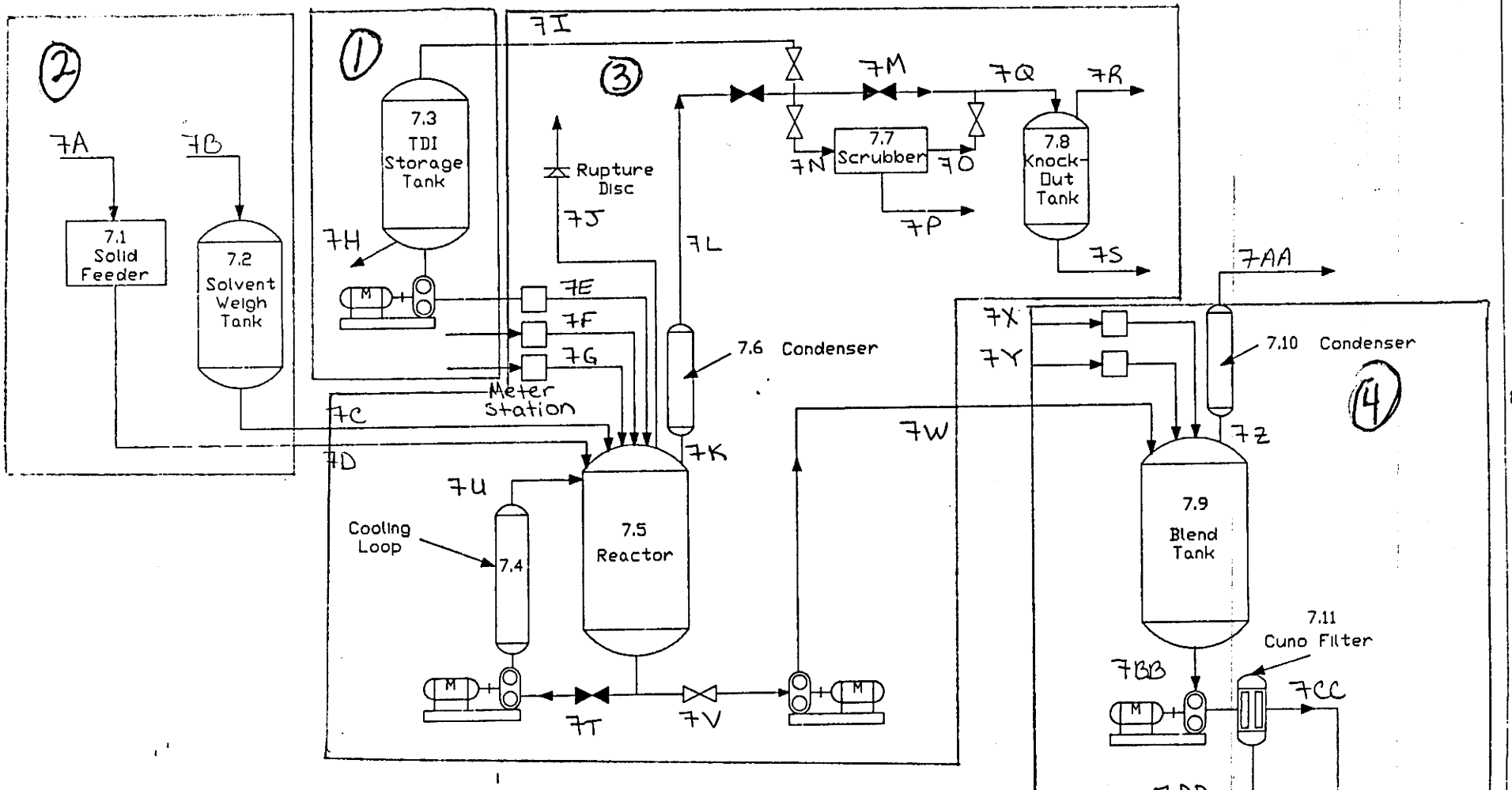
a. Stream ID Code	b. Waste Description Code[1]	c. Management Method Code[2]	d. Residual Quantities (kg/yr)	e. Management of Residual (%) On-Site	e. Management of Residual (%) Off-Site	f. Costs for Off-Site Management (per kg)	g. Changes in Management Methods
7UUU	A08	S	34	100			NONE
		1TR					
		1WT(a)					
		54WT(a)					
7QQQQ	B82	S	151	100			NONE
		1ST					
		3I					
7FFFF	B60	S	8	100			NONE
		1ST					
		2ST					
		3I					
7CCCC	A05	S	10,000	100			NONE
		1WT(a)					
		54WT(a)					

[1]Use the codes provided in Exhibit 8-1 to designate the waste descriptions.

[2]Use the codes provided in Exhibit 8-2 to designate the management methods

[ ] Mark (X) this box if you attach a continuation sheet.

Process Type.....



LEGEND

NORMALLY OPEN

NORMALLY CLOSED

1 - STORAGE AND T/T UNLOADING AREA
2 - 2ND FLOOR CHARGING AREA
3 - 1ST FLOOR REACTOR AREA
4 - FILTERING AREA

Question 9.04

5 Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... F I, II, III

Work area 2

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
A	1	Inhalation	OL	B	125
B	1	Inhalation	OL	B	70
C	NA	NA	NA	NA	NA
D	1	Inhalation	OL	A	100
E	NA	NA	NA	NA	NA

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

[ ] Mark (X) this box if you attach a continuation sheet.

5 Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type .... I, II, III

Work area 3

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
A	NA	NA	NA	NA	NA
B	NA	NA	NA	NA	NA
C	NA	NA	NA	NA	NA
D	NA	NA	NA	NA	NA
E	NA	NA	NA	NA	NA

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

[ ] Mark (X) this box if you attach a continuation sheet.

6 Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... I, II, III

Work area 4

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
A	NA	NA	NA	NA	NA
B	NA	NA	NA	NA	NA
C	NA	NA	NA	NA	NA
D	NA	NA	NA	NA	NA
E	NA	NA	NA	NA	NA

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

[ ] Mark (X) this box if you attach a continuation sheet.

Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type .. I, II, III

Work area 5

Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance[1]	Average Length of Exposure Per Day[2]	Number of Days per Year Exposed
A	NA	NA	NA	NA	NA
B					
C					
D					
E					

[1]Use the following codes to designate the physical state of the listed substance at the point of exposure:

GC = Gas (condensible at ambient temperature and pressure)
GU = Gas (uncondensible at ambient temperature and pressure; includes fumes, vapors, etc.)
SO = Solid
SY = Sludge or slurry
AL = Aqueous liquid
OL = Organic liquid
IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene)

[2]Use the following codes to designate average length of exposure per day:

A = 15 minutes or less
B = Greater than 15 minutes, but not exceeding 1 hour
C = Greater than one hour, but not exceeding 2 hours
D = Greater than 2 hours, but not exceeding 4 hours
E = Greater than 4 hours, but not exceeding 8 hours
F = Greater than 8 hours

[ ] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... All

Work area 2

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust	Y	1988	N	
General dilution	Y	1966	N	
Other (specify)				
Vessel emission controls	Y	1966	N	
Mechanical loading or packaging equipment				
Other (specify)				

[ ] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... All

Work area 3

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust	Y	1988	N	
General dilution	Y	1966	N	
Other (specify)				
Vessel emission controls	Y	1989	N	
Mechanical loading or packaging equipment				
Other (specify)				

[X] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... All

Work area 4

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust	Y	1988	N	
General dilution	Y	1966	N	
Other (specify)				
Vessel emission controls	Y	1966	N	
Mechanical loading or packaging equipment				
Other (specify)				

[X] Mark (X) this box if you attach a continuation sheet.

PART C ENGINEERING CONTROLS

9.12 Describe the engineering controls that you use to reduce or eliminate worker exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... All

Work area 5

Engineering Controls	Used (Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Ventilation:				
Local exhaust	Y	1966	Y	1987
General dilution	Y	1966	N	
Other (specify)				
Vessel emission controls	NA			
Mechanical loading or packaging equipment	NA			
Other (specify)				

[ ] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type .... I, II, III

Work area 2

Equipment Types	Wear or Use (Y/N)
Respirators	Y
Safety goggles/glasses	Y
Face shields	Y
Coveralls	N
Bib aprons	Y
Chemical-resistant gloves	Y
Other (specify)	

[X] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type .... I, II, III

Work area 3

Equipment Types	Wear or Use (Y/N)
Respirators	N
Safety goggles/glasses	Y
Face shields	N
Coveralls	N
Bib aprons	Y
Chemical-resistant gloves	Y
Other (specify)	

[X] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... I, II, III

Work area 4

Equipment Types	Wear or Use (Y/N)
Respirators	N
Safety goggles/glasses	Y
Face shields	N
Coveralls	N
Bib aprons	N
Chemical-resistant gloves	Y
Other (specify)	

[X] Mark (X) this box if you attach a continuation sheet.

PART D PERSONAL PROTECTIVE AND SAFETY EQUIPMENT

9.14 Describe the personal protective and safety equipment that your workers wear or use in each work area in order to reduce or eliminate their exposure to the listed substance. Photocopy this question and complete it separately for each process type and work area.

CBI

[ ] Process type ..... I, II, III

Work area 5*

Equipment Types	Wear or Use (Y/N)
Respirators	N
Safety goggles/glasses	N
Face shields	N
Coveralls	N
Bib aprons	N
Chemical-resistant gloves	N
Other (specify)	
_____	_____
_____	_____

*Control room area is an environmentally safe self-enclosed area.

[ ] Mark (X) this box if you attach a continuation sheet.

10.08 Describe the control technologies used to minimize release of the listed substance for each process stream containing the listed substance as identified in your process block or residual treatment block flow diagram(s). Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... PRODUCTION OF II

Stream ID Code	Control Technology	Percent Efficiency
700	NEUTRALIZATION	>90%
7PP	SCRUBBER	>90%
755	SCRUBBER	>90%

[X] Mark (X) this box if you attach a continuation sheet.

10.08 Describe the control technologies used to minimize release of the listed substance for each process stream containing the listed substance as identified in your process block or residual treatment block flow diagram(s). Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... PRODUCTION OF III

Stream ID Code	Control Technology	Percent Efficiency
7UUUU	NEUTRALIZATION	>90%
7VVVV	SCRUBBER	>90%
7YYYY	SCRUBBER	>90%

[ ] Mark (X) this box if you attach a continuation sheet.

PART B RELEASE TO AIR

10.09 Point Source Emissions -- Identify each emission point source containing the listed substance in terms of a Stream ID Code as identified in your process block or residual treatment block flow diagram(s), and provide a description of each point source. Do not include raw material and product storage vents, or fugitive emission sources (e.g., equipment leaks). Photocopy this question and complete it separately for each process type.

CBI
[ ]

Process type ..... Production of IL

Point Source ID Code	Description of Emission Point Source
7YY	BUILDING 2 VENT

[X] Mark (X) this box if you attach a continuation sheet.

PART B RELEASE TO AIR

10.09 Point Source Emissions -- Identify each emission point source containing the listed substance in terms of a Stream ID Code as identified in your process block or residual treatment block flow diagram(s), and provide a description of each point source. Do not include raw material and product storage vents, or fugitive emission sources (e.g., equipment leaks). Photocopy this question and complete it separately for each process type.

CBI

[ ]

Process type ..... Production of TII

Point Source ID Code	Description of Emission Point Source
7EEEE	BUILDING 2 VENT

[ ] Mark (X) this box if you attach a continuation sheet.

PART C FUGITIVE EMISSIONS

10.13 Equipment Leaks -- Complete the following table by providing the number of equipment types listed which are exposed to the listed substance and which are in service according to the specified weight percent of the listed substance passing through the component. Do this for each process type identified in your process block or residual treatment block flow diagram(s). Do not include equipment types that are not exposed to the listed substance. If this is a batch or intermittently operated process, give an overall percentage of time per year that the process type is exposed to the listed substance. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... PRODUCTION OF II

Percentage of time per year that the listed substance is exposed to this process type ..... 100 %

Equipment Type	Number of Components in Service by Weight Percent of Listed Substance in Process Stream					
	Less than 5%	5-10%	11-25%	26-75%	76-99%	Greater than 99%
Pump seals[1]						
Packed						
Mechanical						
Double mechanical[2]						
Compressor seals[1]						
Flanges						6
Valves						
Gas[3]						
Liquid						12
Pressure relief devices[4] (Gas or vapor only)						1
Sample connections						
Gas						
Liquid						
Open-ended lines[5] (e.g., purge, vent)						
Gas						1
Liquid						

[1] List the number of pump and compressor seals, rather than the number of pumps or compressors

10.13 continued on next page

[X] Mark (X) this box if you attach a continuation sheet.

PART C FUGITIVE EMISSIONS

10.13 Equipment Leaks -- Complete the following table by providing the number of equipment types listed which are exposed to the listed substance and which are in service according to the specified weight percent of the listed substance passing through the component. Do this for each process type identified in your process block or residual treatment block flow diagram(s). Do not include equipment types that are not exposed to the listed substance. If this is a batch or intermittently operated process, give an overall percentage of time per year that the process type is exposed to the listed substance. Photocopy this question and complete it separately for each process type.

CBI

[ ] Process type ..... PRODUCTION OF III

Percentage of time per year that the listed substance is exposed to this process type ..... 100 %

Equipment Type	Number of Components in Service by Weight Percent of Listed Substance in Process Stream					
	Less than 5%	5-10%	11-25%	26-75%	76-99%	Greater than 99%
Pump seals[1]						
Packed						
Mechanical						
Double mechanical[2]						
Compressor seals[1]						
Flanges						
Valves						6
Gas[3]						
Liquid						
Pressure relief devices[4] (Gas or vapor only)						12
Sample connections						1
Gas						
Liquid						
Open-ended lines[5] (e.g., purge, vent)						
Gas						
Liquid						1

[1] List the number of pump and compressor seals, rather than the number of pumps or compressors

10.13 continued on next page

[ ] Mark (X) this box if you attach a continuation sheet.